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April 11, 2016

Via Certified Mail – Return Receipt Requested

The Hon. Regina McCarthy, Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, DC 20460

Secretary Donald R. van der Vaart
N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

Ms. Lynn J. Good, President and Chief Executive Officer
Duke Energy Progress, LLC
P. O. Box 1771
Raleigh, NC 27602

Notice of Intent To Sue
Clean Water Act Section 505 - 33 U.S.C. § 1365

RE: 60-Day Notice of Violations by Duke Energy Progress, LLC
Mayo Steam Plant
NPDES Permit # NC0038377

To Whom It May Concern:

Pursuant to Section 505 (b) of the Clean Water Act (33 U.S.C. §1365 (b)), the Roanoke River Basin Association, through its undersigned counsel, provides notice of the violations of effluent standards and limitations and the Clean Water Act set forth below. 33 U.S.C. § 1365 (f). After the expiration of sixty (60) days, the Roanoke River Basin Association intends to bring suit for these violations pursuant to the citizen suit provision of the Clean Water Act, Section 505 (a), 33 U.S.C. §1365 (a).

Background & Location of Violations

Mayo Coal Ash Pollution. Duke Energy Progress, LLC (Duke Energy), owns and operates the Mayo Steam Plant, a coal-fired electricity generating plant in Roxboro, Person County, North Carolina. At the Mayo site, Duke Energy stores approximately 6.9 million tons of

coal ash in an unlined pit on the banks of Mayo Lake, a popular recreational lake for the region. Duke Energy dammed Crutchfield Branch by constructing a 110 foot-high dam in the middle of the stretch of Crutchfield Branch in North Carolina. This dam creates a 144-acre reservoir that fills the pit with water. In addition, groundwater and rain water flow into the pit. Crutchfield Branch flows out of the dam and into the Roanoke River Basin, through the states of Virginia and North Carolina. *See* Duke Energy, Comprehensive Site Assessment (Sept. 2, 2015) ("CSA"), Figure 1-1, attached hereto as Attachment 1.

Duke Energy discharged into the pit coal ash and other substances from the burning of coal. Duke Energy also placed other wastewater streams and wastes into the pit, including coal pile runoff, stormwater runoff, cooling tower blowdown, reverse osmosis wastewater, plant area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage.

Duke Energy is authorized to operate the reservoir as a waste water treatment facility under a National Pollution Discharge Elimination System (NPDES) Permit issued by the North Carolina Department of Environmental Quality (DEQ), NPDES Permit # NC0038377. Attachment 2. Duke Energy committed to treat the wastewater through a settling process, in which sediments, solids, and other pollutants settle to the bottom of the pit. Then, supposedly treated wastewater at the top of the reservoir is discharged through a riser system.

Under the NPDES Permit, Duke Energy is authorized to discharge treated wastewater from the coal ash pit only from a designated outfall, a canal that flows into Mayo Lake. Duke Energy is not authorized otherwise to make any discharges from the coal ash pit into waters of the State or of the United States, including groundwater, rivers, streams, or lakes. In particular, Duke Energy is not authorized to make any discharges from the coal ash pit into Crutchfield Branch. In fact, the NPDES Permit expressly provides that "[t]here shall be no direct discharge of waste water from the ash pond to Crutchfield Branch," and that "there shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharge from the ash pond." Attachment 2, Part I, Section A.8.

The NPDES Permit for the Mayo ash pit also expressly forbids Duke Energy from polluting waters of the state and navigable waters – including groundwater, Crutchfield Branch, and Mayo Lake – with pollutants and other materials removed during the course of wastewater treatment. The Removed Substances provision of the NPDES Permit provides: "Solids, sludges, . . . or other pollutants removed during the course of treatment or control of wastewaters shall be utilized/disposed of . . . in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States." Attachment 2, Part II, Section C.6.

In violation of these Permit provisions and other provisions of the Permit, Duke Energy has for years been illegally polluting groundwater, Crutchfield Branch, and Mayo Lake with pollutants from its Mayo coal ash pit. The coal ash pit has contaminated groundwater with various coal ash pollutants, including antimony, arsenic, barium, boron, chromium, cobalt, iron, manganese, pH, thallium, total dissolved solids (TDS), and vanadium. Duke Energy, Corrective

Action Plan Part 1 (December 1, 2015) ("CAP Pt. 1"), at Table 1-1.[1] This contaminated groundwater flows into Crutchfield Branch and Mayo Lake. Duke Energy, CSA, at 30.[2] In addition, contaminated wastewater flows out of the dam and coal ash pit directly into Crutchfield Branch through seeps and engineered drains. CAP Pt. 1 at p. 1-7. In Crutchfield Branch, numerous pollutants have exceeded water quality standards, including aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc. CAP Pt. 1 at Table 1-3.

State Court Enforcement Action. In 2013, citizen conservation groups represented by the Southern Environmental Law Center sent to Duke Energy companies, US EPA, and DEQ 60-Day Notices of Intent to Sue under the Clean Water Act. These notices set out violations of the Clean Water Act as a result of coal ash pollution by Duke Energy companies at their Asheville, Riverbend, and Sutton stations in North Carolina. In response to these notices, DEQ filed a series of enforcement actions in North Carolina Superior Court purporting to take enforcement action against Duke Energy companies for violating North Carolina anti-pollution laws through their coal ash pollution at every site in North Carolina where Duke Energy companies store coal ash. *See* Michael Biesecker and Mitch Weiss, *N.C. Regulators Shielded Duke's Coal Ash Pollution*, Associated Press (Feb. 9, 2014), *available at* http://bigstory.ap.org/article/nc-regulators-shielded-dukes-coal-ash-pollution.

In August 2013, DEQ filed an enforcement action against Duke Energy Progress, LLC, for violations of North Carolina's anti-pollution statutes at a number of its plants, including Mayo. Complaint, *State of North Carolina* ex rel. *N.C. DEQ v. Duke Energy Progress*, No. 13-CVS-11032 (Wake Co.), Attachment 3. As to Mayo, DEQ set out, under oath, that Duke Energy had illegal unpermitted discharges from the coal ash pit, including two illegal engineered flows of wastewater from the coal ash pit's dam, directly into Crutchfield Branch – all in direct violation of the NPDES Permit. *Id.* ¶¶ 55-59. DEQ also set out, under oath, that groundwater monitoring wells at the Mayo coal ash site showed exceedances of state groundwater standards for chromium, manganese, total dissolved solids, and iron. *Id.* ¶¶ 60-64. DEQ stated under oath that Duke Energy's violations of law at Mayo "pose[] a serious danger to the health, safety, and welfare of the people of North Carolina and serious harm to the water resources of the State." *Id.* ¶ 204.

However, DEQ's state court action did not take enforcement action against any of Duke Energy's violations of federal law at the Mayo plant, and DEQ's state court enforcement action did not seek to enforce various specific provisions of the NPDES Permit, including the Removed Substances provision set out above.

DEQ's purported enforcement action as to Mayo has been pending over two and a half years. DEQ has not diligently prosecuted this action as to any site and specifically not as to Mayo. In fact, DEQ has not prosecuted this action at all as to any site, and specifically not as to Mayo. It has not taken a single deposition and not one as to Mayo. It sought to stay its own enforcement action, but the Superior Court refused. Order Denying Plaintiff's Motion to Stay (Sept. 22, 2015), Attachment 4. It entered into an agreement with Duke Energy to conduct no discovery for an extended period of time. It has not filed any motions to ask the Court to require

[1] *Available at* http://edocs.deq.nc.gov/WaterResources/0/doc/321562/Page1.aspx.
[2] *Available at* http://edocs.deq.nc.gov/WaterResources/0/fol/305048/Row1.aspx.

Duke Energy to take any action as to any site and or as to the Mayo site in particular. In short, DEQ has done nothing over the ensuing two and a half years to pursue this enforcement action as to Mayo – or any other site, for that matter.

The United States District Court for the Middle District of North Carolina has concluded that DEQ has not diligently prosecuted its enforcement actions. In rejecting the motion of Duke Energy Carolinas, LLC, to dismiss a federal Clean Water Act suit over coal ash pollution at the Buck facility in Salisbury, North Carolina, the U.S. District Court found that in the year following the filing of the enforcement action, DEQ "appears to have done little, if anything, to move the case forward" and that "there appeared little likelihood that [DEQ's] action would proceed expeditiously to a final resolution." The Court ruled that it "is unable to find that [DEQ] was trying diligently or that its state enforcement action was calculated, in good faith, to require compliance with the Act." Order Denying Motion to Dismiss, *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, No. 1:14-CV-753, --- F.Supp.3d. ---, 2015 WL 6157706, at *15-16 (M.D.N.C. Oct. 20, 2015).

As the Middle District Court found, DEQ is not enforcing at all and is not diligently enforcing any claims as to Duke Energy's coal ash pollution. The same is true at the Mayo facility. In addition, as set out above, the state court enforcement action does not seek to enforce any federal claims and does not enforce the Removed Substances provision of the permit and other permit violations. It does not address at all Duke Energy's plans to bury Crutchfield Branch permanently in coal ash and other sludge and pollutants or to permanently fill groundwater with coal ash and other sludge and pollutants, as set out below.

Unlawful Burying of Crutchfield Branch and Discharge and Abandonment of Ash in Groundwater. Under Section 404 of the Clean Water Act, a corporation like Duke Energy must obtain a permit from the United States Army Corps of Engineers in order to discharge dredged or fill materials into navigable waters. 33 U.S.C. §1344. Before the U.S. Army Corps of Engineers may issue a Section 404 permit, under Section 401 of the Clean Water Act the applicant must obtain a water quality certification from the state environmental agency, in North Carolina DEQ. 33 U.S.C. §1341. Also under the Clean Water Act, a corporation like Duke Energy must obtain a National Pollution Discharge Elimination System (NPDES) permit in order to discharge any pollutant into waters of the United States. 33 U.S.C. §1342. In North Carolina, the NPDES permit is obtained from DEQ, which operates the NPDES program in North Carolina under authority delegated by the United States Environmental Protection Agency.

Duke Energy's Mayo coal ash lagoon was formed by the damming of Crutchfield Branch, a navigable water and a water of the United States and of North Carolina. In 1978, Duke Energy (then known as Carolina Power & Light) was granted authority under Section 404 of the Clean Water Act to construct the dam across Crutchfield Branch by the United States Army Corps of Engineers pursuant to a nationwide permit then in effect. Since Duke Energy began using the lagoon, Duke Energy has operated it under an NPDES permit that permits its operation as a wastewater treatment facility. The current NPDES wastewater treatment system permit is NPDES Permit NC0038377, issued in 2009. Attachment 2. The NPDES permit authorizes only controlled discharges out of the lagoon, into a canal, and then into Mayo Lake.

The NPDES permit does not authorize any discharges into Crutchfield Branch and, as set out above, expressly prohibits them.

During the operation of the Mayo coal ash lagoon, Duke Energy has placed millions of tons of coal ash and other pollutants, solids, and sludge into the reservoir behind the dam and into and over the portion of Crutchfield Branch behind the dam. As a result, the portion of Crutchfield Branch that flows behind the dam and that is encompassed by the coal ash lagoon is filled with and buried under millions of tons and tens of feet of coal ash, sludge, and pollutants from the wastewater treatment facility.

In addition, Duke Energy has placed millions of tons and approximately 80 vertical feet of coal ash, sludge, and pollutants into the groundwater at the location of the Mayo coal ash lagoon. USGS topography of the site before the basin was constructed shows the elevation at the bottom of the Crutchfield Branch stream valley of 400 feet above sea level, and Duke Energy's own reports show that the groundwater elevation in the basin is at least 480 feet above sea level. Thus, the coal ash is submerged approximately 80 feet deep in groundwater at Mayo. *See* CSA, Figure 6-2.

Under North Carolina's Coal Ash Management Act, no later than December 31, 2029 (and perhaps earlier), Duke Energy must close the Mayo coal ash lagoon, and all its other coal ash lagoons in the state, by removing the water from the lagoons, among other things. The Act, depending upon decisions made by Duke Energy and various governmental actors, allows in general for the alternative of leaving the coal ash in place, after the water is drained. This approach is the so-called "Cap in Place" approach. However, The Act expressly does not seek to undo remedies under the Clean Water Act.

At Mayo, this "Cap in Place" approach would bury Crutchfield Branch and fill groundwater in millions of tons and tens of feet of coal ash, sludge, and pollutants, all in violation of the Clean Water Act.

As part of the Coal Ash Management Act process, Duke Energy has prepared and submitted to DEQ studies for the closure, dismantling, and dewatering of the Mayo coal ash lagoon. According to materials submitted by Duke Energy, it is considering a plan to remove the water from the Mayo coal ash lagoon, to remove the dam, and to bury Crutchfield Branch and fill groundwater with millions of tons and tens of feet of coal ash, sludge, and pollutants. It is expected that Duke Energy will adopt this approach. In prioritization rankings that DEQ issued under the Coal Ash Management Act on December 31, 2015, DEQ gave the Mayo coal ash lagoon a "low" rating – which would allow for the coal ash, sludge, and pollutants to bury Crutchfield Branch and fill groundwater and be "capped" in place. A significant stretch of Crutchfield Branch will thus be buried forever in coal ash, sludge, and pollutants, and coal ash, sludge, and pollutants will remain forever in groundwater at the site. Duke Energy's "Cap in Place" modeling shows that groundwater levels in the basin will remain 60-70 feet above the bottom of the coal ash. *See* CAP Pt. 1, Appendix E, at Figure 17a.

When Duke Energy decants the top layers of water from the Mayo coal ash lagoon, the lagoon will no longer be functioning as a waste water treatment facility. The Mayo coal ash

lagoon treated wastewater through a settling process, by which materials settled out of the top layers of the water in the lagoon down to the bottom. Once Duke Energy interferes with this process and otherwise begins removing water from the lagoon, this wastewater treatment system will no longer be operating. Further, once the water is removed and/or the dam is altered or dismantled, the Mayo coal ash lagoon will no longer be operating as a wastewater lagoon.

Toxic Effects of Pollutants

Arsenic is a known carcinogen that causes multiple forms of cancer in humans. It is also a toxic pollutant, 40 C.F.R. § 401.15, and a priority pollutant, 40 C.F.R. Part 423 App'x A. Arsenic is also associated with non-cancer health effects of the skin and the nervous system.

Antimony is listed as a toxic pollutant, 40 C.F.R. § 401.15, and is associated with reduced lifespan, decreased blood glucose, and altered cholesterol in rodents, and with vomiting and cardiac and respiratory effects in humans.

According to the U.S. Agency for Toxic Substances and Disease Registry (ATSDR), vanadium can cause nausea, diarrhea, and stomach cramps. And the International Agency for Research on Cancer (IARC) has determined that vanadium is possibly carcinogenic to humans.

Barium can cause gastrointestinal disturbances and muscular weakness. Ingesting large amounts, dissolved in water, can change heart rhythm and can cause paralysis and possibly death. Barium can also cause increased blood pressure.

Oral exposure to boron has led to developmental and reproductive toxicity in multiple species. Specific effects include testicular degeneration, reduced sperm count, reduced birth weight, and birth defects.

Chromium is a toxic pollutant, 40 C.F.R. § 401.15, and oral exposure to chromium VI, a human carcinogen, has been found to cause cancers of the stomach and mouth. Exposure to the skin may cause dermatitis, sensitivity, and ulceration of the skin.

IARC has determined that cobalt is possibly carcinogenic to humans. Short-term exposure of rats to high levels of cobalt in the food or drinking water resulted in effects on the blood, liver, kidneys, and heart. Longer-term exposure of rats, mice, and guinea pigs to lower levels of cobalt in the food or drinking water results in effects on the same tissues (heart, liver, kidneys, and blood) as well as the testes, and also caused effects on behavior. Sores were seen on the skin of guinea pigs following skin contact with cobalt for 18 days.

Copper is a toxic pollutant, 40 C.F.R. § 401.15, and according to EPA, people who consume drinking water with high levels of copper can experience gastrointestinal distress, and with long-term exposure may experience liver or kidney damage.

According to the ATSDR, some studies show that people exposed to high levels of aluminum may develop Alzheimer's disease. People with kidney disease have trouble removing aluminum from their system.

Iron can render water unusable by imparting a rusty color and a metallic taste and causing sedimentation and staining; to prevent these effects the EPA has set a secondary drinking water standard of 300 ug/L.

Manganese is known to be toxic to the nervous system. Manganese concentrations greater than 50 ug/L render water unusable by discoloring the water, giving it a metallic taste, and causing black staining. Exposure to high levels can affect the nervous system; very high levels may impair brain development in children.

Thallium is a toxic pollutant, 40 C.F.R. § 401.15, and exposure to high levels of thallium can result in harmful health effects. Studies in rats have shown adverse developmental effects from exposure to high levels of thallium, and some adverse effects on the reproductive system after ingesting thallium for several weeks.

Zinc is a toxic pollutant, 40 C.F.R. § 401.15, and according to ATSDR, ingesting high levels of zinc may cause stomach cramps, nausea, and vomiting. Ingesting high levels of zinc for several months may cause anemia, damage the pancreas, and decrease levels of high-density lipoprotein (HDL) cholesterol.

High concentrations of total dissolved solids can make drinking water unpalatable and can cause scale buildup in pipes, valves, and filters, reducing performance and adding to system maintenance costs.

Concurrent exposure to multiple contaminants may intensify existing effects of individual contaminants, or may give rise to interactions and synergies that create new effects. Where several coal ash contaminants share a common mechanism of toxicity or affect the same body organ or system, exposure to several contaminants concurrently produces a greater chance of increased risk to health.

DESCRIPTION OF VIOLATIONS

The following are continuing violations by Duke Energy of the Clean Water Act and the Mayo NPDES permit:

I. Unlawful and Unpermitted Burying of Crutchfield Branch in Violation of Section 404, Section 401, and Section 402

By burying Crutchfield Branch in coal ash and sludge after ceasing to operate the Mayo wastewater treatment facility, Duke Energy will violate the Clean Water Act. Duke Energy received Section 404 authorization for the dam across Crutchfield Branch, but Duke Energy has

no Section 404 permit from the U.S. Army Corps of Engineers to fill Crutchfield Branch upstream or downstream of the dam with sludge, coal ash, sediments, pollutants, and other fill and dredged material. Duke Energy will violate Section 404 both by filling and burying Crutchfield Branch in millions of tons of fill, sludge, coal ash, pollutants, and sediments, and also by moving fill, sludge, coal ash, pollutants, and sediments, and other dredged and fill material into and around in Crutchfield Branch to construct a "Cap in Place" storage mound and by placing dirt and other materials on top of Crutchfield Branch to construct a "Cap in Place" storage mound.

Further, Duke Energy has not obtained a Section 401 certification from DEQ as a prerequisite for a Section 404 permit to bury and fill Crutchfield Branch in this way.

In addition, Duke Energy has no Section 402 NPDES permit to discharge coal ash, sludge, fill, sediments, and pollutants from these materials into Crutchfield Branch. Duke Energy has a Section 402 NDPES permit to discharge from a specific discharge point from the operating wastewater treatment lagoon, out of the lagoon and into a canal that flows into Mayo Lake. But Duke Energy has no Section 402 NPDES permit for any discharge into Crutchfield Branch. Further Duke Energy has no Section 402 NPDES permit for any discharges into Crutchfield Branch upstream of what has been the Mayo wastewater treatment lagoon dam. The Clean Water Act is violated not only by Duke Energy burying Crutchfield Branch in coal ash, sludge, fill, sediments, and pollutants; Duke Energy will also continually pollute Crutchfield Branch by the flow and leaching of pollutants out of these materials into the Branch and by moving pollutants, coal ash, sediments, sludge, and fill into the Branch and within the Branch when putting in place its "Cap in Place" storage mound.

Therefore, burying Crutchfield Branch in fill, sludge, coal ash, sediments, sewage sludge, and other materials and pollutants, and thereafter polluting Crutchfield Branch with those materials and pollutants from them, violate Sections 401, 402, and 404 of the Clean Water Act.

Because these permit violations are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

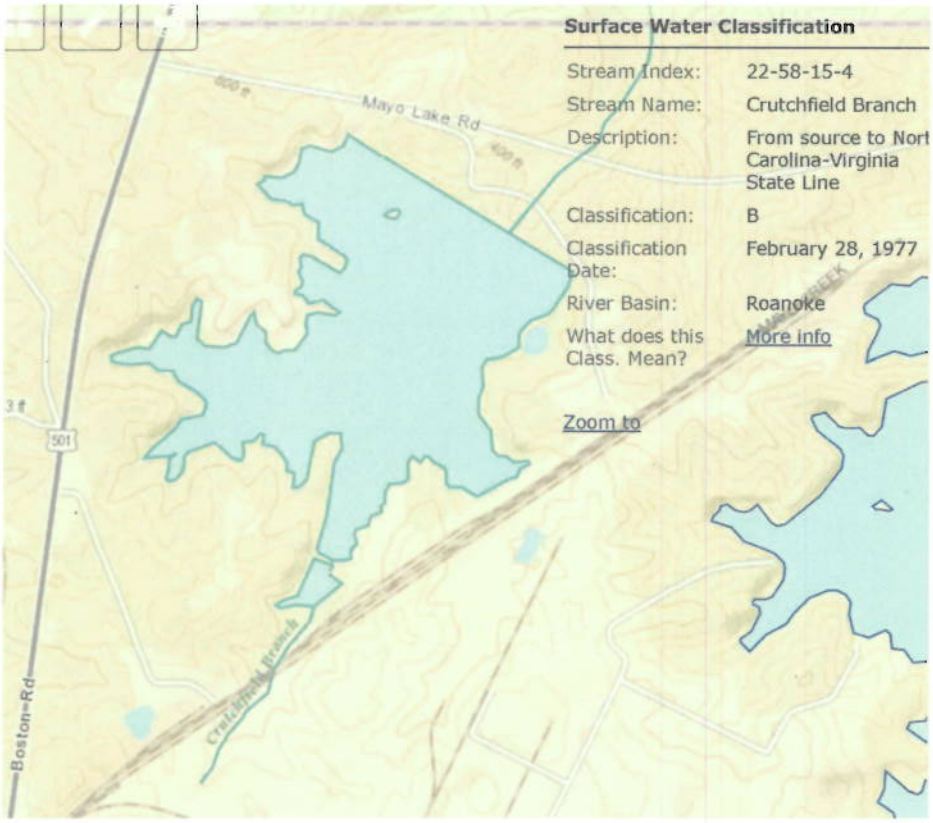
II. Unlawful Burying and Filling of Crutchfield Branch and Groundwater in Violation of Mayo NPDES Permit

Moreover, "Cap in Place" plans for the Mayo coal ash lagoon violate the existing NPDES permit.

First, as set out above, Duke Energy's NPDES permit does not authorize any discharges into Crutchfield Branch. By discharging pollutants into Crutchfield Branch and causing the discharge of pollutants into Crutchfield Branch for decades into the future, Cap In Place will violate the existing NPDES permit, as well as the Clean Water Act as the lagoon ceases to be a wastewater treatment facility.

Second, the NPDES permit contains a Removed Substances provision, which provides: "Solids, sludges, backwater fill, or other pollutants removed in the course of treatment or control

of wastewaters shall be utilized/disposed of . . . in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States." Attachment 2, at Part II, Section C.6. Crutchfield Branch is a water of the State from its source to the Virginia state line,[3] and a navigable water of the United States.



That is why Duke Energy needed Clean Water Act authorization to dam Crutchfield Branch and why the NPDES permit protects it. The proposed "Cap in Place" disposes of solids, sludges, and other pollutants removed in the course of treatment or control of wastewaters in waters of the State and a navigable water of the United States. This is a blatant violation of the existing NPDES permit.

Likewise, by disposing of millions of tons and tens of feet of coal ash, solids, sludges, and other pollutants in the groundwater – which is water of the State – and disposing of those materials in the groundwater forever, "Cap in Place" violates the Removed Substance permit provision.

Indeed, the NPDES permit for a wastewater treatment facility would make no sense if the operator could dispose of and leave the waste and pollutants removed during treatment in a water of the State and a navigable water of the United States. In that case, the wastewater treatment facility would have failed its basic function: It would have removed waste and pollutants from

[3] N.C. Dept. of Environmental Quality, NC Surface Water Classifications, Stream Index 22-58-15-4 (listing Crutchfield Branch as Class B waters of the State "From source to North Carolina-Virginia State Line"), *available at* http://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265.

wastewater before the supposedly treated wastewater is discharged into waters of the state and nation, but then it would dispose of, deposit, and leave those wastes and pollutants in waters of the state and nation to pollute those waters.

For these reasons, "Cap in Place" in Crutchfield Branch and in groundwater to dispose of the sludge, coal ash, pollutants, sediments, sewage sludge, and other materials in the defunct Mayo coal ash lagoon – which will also leach and discharge pollutants from these materials into Crutchfield Branch and groundwater for decades to come – violates the Clean Water Act and Duke Energy's NPDES permit issued under the Act.

Because these permit violations are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

III. Unauthorized Point Source Discharges to Waters of the United States

Section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants from a point source to waters of the United States except in compliance with, among other conditions, a National Pollutant Discharge Elimination System ("NPDES") permit issued pursuant to § 402 of the CWA, 33 U.S.C. § 1342. Each violation of the permit – and each discharge that is not authorized by the permit – is a violation of the Clean Water Act.

The CWA defines a "point source" as "*any* discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, [or] container ... from which pollutants are or may be discharged." 33 U.S.C. § 1362(14) (emphasis added). Under this broad definition, the discharge of pollutants from mining pits, slurry ponds, sediment basins, and mining leachate collection systems have been held to be point sources. *E.g.*, *U.S. v. Earth Sciences, Inc.*, 599 F.2d 368, 374 (10th Cir. 1979) ("[W]hether from a fissure in the dirt berm or overflow of a wall, the escape of liquid from the confined system is from a point source."); *Consolidation Coal Co. v. Costle*, 604 F.2d 239, 249-50 (4th Cir. 1979) (finding regulation of "discharges from coal preparation plant associated areas," which in turn included slurry ponds, drainage ponds, and coal refuse piles, was within CWA definition of point source), *rev'd on other grounds*, 449 U.S. 64 (1980).

In addition, a "point source need not be the original source of the pollutant; it need only convey the pollutant to 'navigable waters.'" *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004); *accord W. Va. Highlands Conservancy*, 625 F.3d at 168 (permits are required for discharges from point sources that "merely convey pollutants to navigable waters"). Thus, ditches and channels that convey pollutants but are themselves not the original source constitute point sources. This includes unintentional conveyance of pollutants, for example, through natural-formed ditches, gullies, or fissures. *See Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 45 (5th Cir. 1980) (discharge from mining pits and spoil piles through naturally formed ditches caused by gravity flow at a coal mining site are point sources); *Earth Sciences*, 599 F.2d 368 (holding unintentional discharges of pollutants from a mine system designed to catch runoff from gold leaching site during periods of excess melting met the

statutory definition of a point source); *N.C. Shellfish Growers Ass'n v. Holly Ridge Assocs., LLC*, 278 F. Supp. 2d 654, 679 (E.D.N.C. 2003) ("Notwithstanding that it may result from such natural phenomena as rainfall and gravity, the surface run-off of contaminated waters, once channeled or collected, constitutes discharge by a point source."); *O'Leary v. Moyer's Landfill, Inc.*, 523 F. Supp. 642, 655 (E.D. Pa. 1981) (intent of the discharging entity is irrelevant).

The U.S. District Court for the Middle District of North Carolina recently confirmed that "[a]s confined and discrete conveyances, [coal ash] lagoons fall within the CWA's definition of 'point source.'" Order Denying Motion to Dismiss, *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, No. 1:14-CV-753, --- F.Supp.3d. ---, 2015 WL 6157706, at *8 (M.D.N.C. Oct. 20, 2015).

The Mayo coal ash pit is discharging in violation of the Clean Water Act because there are multiple unpermitted flows of wastewater leaving the pit. Duke Energy has even constructed unpermitted channels to facilitate the illegal flow of these waters out of the coal ash lagoon into waters of the United States. These are all point sources under the CWA that convey unpermitted discharges into waters of the United States and of North Carolina. These seeps include those set out in the attached figure and engineered toe drains running from the dam to Crutchfield Branch. CSA Figure 2-1, Attachment 5.

Indeed, the unpermitted illegal engineered toe drains are substantively identical to the engineered unpermitted discharges which formed the basis of criminal guilty pleas entered by Duke Energy operating companies in May 2015. If anything, the legal violations are even more egregious, because the Mayo NPDES permit also includes an express prohibition of direct discharges to Crutchfield Branch specifically.

The ash pit at Mayo has received coal ash and other substances from the burning of coal, coal pile runoff, stormwater runoff, cooling tower blowdown, reverse osmosis wastewater, plant area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage. These substances contain metals including aluminum, arsenic, barium, boron, chromium, , cobalt, vanadium, and zinc. When the ash comes into contact with water, these metals and pollutants leach or dissolve into the water.

As described in the Background and Location of Violations section above, the illegal discharges at Mayo contain elevated concentrations of pollutants including: arsenic, cobalt, vanadium, barium, boron, chromium, aluminum, pH, total dissolved solids, iron, manganese, and zinc.

As described above, the Mayo coal ash lagoon, its dam, its leaks, flows, streams, and seeps, and the engineered ditches are all unpermitted point sources under the Clean Water Act.

Because these discharges are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

IV. Illegal Direct Discharges to Crutchfield Branch

As set out above, Duke Energy's direct discharges to Crutchfield Branch violate an additional, express provision of the NPDES Permit. In Part 1, Section A (8), the Permit provides: "There shall be no direct discharge of wastewater from the ash pond to Crutchfield Branch." Attachment 2. Duke Energy is thus also violating this provision of the Permit.

Because these discharges and permit violations are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

V. Illegal Violations of Water Quality Strandards in Crutchfield Branch Due to Indirect Discharges

As set out above, in Crutchfield Branch, numerous pollutants have exceeded water quality standards, including aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc. These violations of water quality standards in Crutchfield Branch are due to indirect discharges from Duke Energy's coal ash lagoon. In Part 1, Section A (8), the Permit provides: "There shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharges from the ash pond." Attachment 2. Duke Energy is thus also violating this provision of the Permit.

Because these discharges and permit violations are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

VI. Unauthorized Discharges to State Waters and Navigable Waters and Violations of NPDES Permit Conditions

Duke Energy has violated the CWA by violating an express condition in its NPDES permit for Mayo barring the pollutants from the coal ash lagoons entering North Carolina waters and navigable waters. Duke Energy's NPDES permit, Part II.B.1, states that "[t]he Permittee must comply with all conditions of this permit. *Any permit noncompliance constitutes a violation of the CWA* . . . and is grounds for enforcement action . . . ." Attachment 2.

Duke Energy has violated "an effluent standard or limitation," as defined under CWA § 505(f), 33 U.S.C. § 1365(f), by violating an express condition of the NPDES permit for the Mayo Plant. Duke Energy has violated the provision of its NPDES permit prohibiting the entrance of pollutants from the coal ash lagoons into North Carolina waters or navigable waters. Part II.C.6 of the permit requires that:

> Solids, sludges . . . or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of . . . in a manner such as to *prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States.*"

Attachment 2 (emphasis added). The ash lagoon receives and treats various waste streams, including coal ash and other substances from the burning of coal, coal pile runoff, stormwater

runoff, cooling tower blowdown, reverse osmosis wastewater, plant area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage. These waste streams are treated by sedimentation in the ash lagoons. Pollutants that have been removed in the course of treatment are stored in the Mayo coal ash lagoon.

This provision prohibits the permittee from allowing coal ash contaminants removed in the course of treatment (*i.e.*, settling) as well as coal ash and other substances from the burning of coal, coal pile runoff, stormwater runoff, cooling tower blowdown, reverse osmosis wastewater, plant area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage – and pollutants, solids, sediments, and sludge from them – to enter the waters of North Carolina and navigable waters of the United States. Groundwater is included in the North Carolina pollution control statute's definition of waters of the state. N.C. Gen. Stat. § 143-212(6). So is Crutchfield Branch and adjacent wetlands, and they are also navigable waters of the United States.

As set out above, "Cap in Place" will violate this Removed Substances permit provision by disposing of coal ash, solids, and sludge in groundwater and Crutchfield Branch. In addition, pollutants, solids, and sludges from Duke Energy's Mayo coal ash lagoon have for years been entering State waters and navigable waters. For years, pollutants from coal ash have been found in ground water under, at, and around the Mayo site. In addition, for years, coal ash, sediments, sludges, and pollutants have been disposed of in the groundwater at Mayo. Monitoring well data from the site show the unlined ash lagoon has caused at least antimony, arsenic, barium, boron, chromium, cobalt, iron, manganese, pH, thallium, TDS, and vanadium to enter the groundwater. Monitoring has also shown that numerous pollutants have entered Crutchfield Branch from the coal ash lagoon, including at least aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc.

The coal ash settling lagoon is a wastewater treatment system; its purpose is to treat and remove solids, sludges, and pollutants. Instead, in violation of an express provision of its permit, Duke Energy has been and is allowing the unpermitted and uncontrolled entrance of solids, sludges, and pollutants into the waters of the State and navigable waters of the United States. Duke Energy's actions are a straightforward violation of this straightforward provision of the permit.

Accordingly, Duke Energy's unauthorized discharges of solids, sludges, and pollutants to State waters – including the groundwater of North Carolina, Mayo Lake, Crutchfield Branch, and adjacent wetlands – constitute violations of its NPDES permit and thus of the Clean Water Act. This prohibition of discharges of pollutants to navigable waters and State waters, including ground waters of the State, is enforceable through a citizen suit under the Clean Water Act. *See* 33 U.S.C. § 1370 (allowing states to adopt and enforce more stringent limitations in CWA permits than the federal government); 33 U.S.C. § 1311(b)(1)(B) (stating that more stringent state limitations in furtherance of the objective of the CWA include "those necessary to meet water quality standards"); *Sierra Club v. Virginia Elec. & Power Co.*, No. 2:15CV112, 2015 WL 6830301, at *6-7 (E.D. Va. Nov. 6, 2015) (allowing citizen suit claims for violation of Removed Substances permit provision for surface and groundwater discharges); *Yadkin Riverkeeper v. Duke Energy Carolinas*, 2015 WL 6157706, at *12 (allowing citizen suit claims

for violation of Removed Substances permit provision for surface and groundwater discharges); *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 810-11 (E.D.N.C. 2014) *amended,* No. 7:13-CV-200-FL, 2014 WL 10991530 (E.D.N.C. Aug. 1, 2014) (allowing citizen suit claims for violation of Removed Substances permit provision for surface and groundwater discharges). *See also Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 152 (4th Cir. 2000) (confirming citizens are "authorized to bring suit against any NPDES permit holder who has allegedly violated its permit."); *Nw. Envtl. Advocates v. City of Portland*, 56 F.3d 979, 986 (9th Cir. 1995) ("The plain language of CWA § 505 authorizes citizens to enforce all permit conditions"); *Culbertson v. Coats Am.*, 913 F. Supp. 1572, 1581 (N.D. Ga. 1995) (holding that "[t]he CWA authorizes citizen suits for the enforcement of all conditions of NPDES permits").

Because these permit violations and discharges from the unlined coal ash lagoon to the waters of the State and to navigable waters of the United States are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

VII. Illegal Discharges through Close Hydrologic Flow into Waters of the United States

According to documents prepared by Duke Energy's own consultant, the contaminated groundwater at Mayo flows directly into Crutchfield Branch and Mayo Lake and adjacent wetlands. These unpermitted discharges of pollutants via hydrologically-connected groundwater to navigable surface waters constitute additional violations of the Clean Water Act.

As discussed above, the Clean Water Act prohibits "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1362(12)(A). "[T]he touchstone for finding a point source is the ability to identify a discrete facility from which pollutants have escaped." *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 987 (E.D. Wash. 1994).

Because there is a direct hydrologic connection between the coal ash lagoon and Crutchfield Branch and Mayo Lake and adjacent wetlands, Duke Energy's discharges from the lagoon via the groundwater to these waters, as well as the lagoon itself, are point sources that violate the Clean Water Act.

In a virtually identical case, the United States District Court for the Middle District of North Carolina held that the Clean Water Act applies to Duke Energy's coal ash pollution of hydrologically-connected groundwater discharges. *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, 2015 WL 6157706 (M.D.N.C.), Order Dated October 20, 2015.

EPA has stated repeatedly that the CWA applies to such hydrologically-connected groundwater discharges. 66 Fed. Reg. 2960, 3015 (Jan. 12, 2001) ("EPA is restating that the Agency interprets the Clean Water Act to apply to discharges of pollutants from a point source via ground water that has a direct hydrologic connection to surface water."). *Accord* 56 Fed. Reg. 64876-01, 64892 (Dec. 12, 1991) ("the Act requires NPDES permits for discharges to

groundwater where there is a direct hydrological connection between groundwaters and surface waters."); 55 Fed. Reg. 47990, 47997 (Nov. 16, 1990) (announcing stormwater runoff rules and explaining that discharges to groundwater are covered by the rule where there is a hydrological connection between the groundwater and a nearby surface water body).

In a 1998 site report, EPA stated that "[a] documented ground water hydrological connection between a source and surface water discharge may be viewed as a conduit; or a discernible, confined, and discrete conveyance," *i.e.*, a point source. U.S. EPA, Report on Hydrological Connection Associated with Molycorp Mining Activity, Questa, New Mexico, at 3 (Feb. 13, 1998). As a result, EPA has identified and regulated as point sources impoundments leaching into groundwater that discharge directly to a neighboring river, exactly as with the situation at Mayo.

In its response to a comment questioning EPA's jurisdiction to regulate such discharges, EPA stated, "*[t]hat a point source may transmit the pollutants to those surface waters through directly connected groundwater does not deprive EPA of jurisdiction over that addition . . . . to protect jurisdictional surface waters from discharges through groundwater, not to protect groundwater quality per se.*" U.S. EPA, Response to Comments on the Proposed National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Concentrated Animal Feeding Operations (CAFOs) in New Mexico (NMG010000) (emphasis added).

In its fact sheet for another NPDES permit, EPA explained, "[i]n most surface waters flow is sustained throughout much of the year by groundwater inflow. As a result, pollutants which may leak from containment structures . . . to the groundwater will typically move toward nearby surface waters where they will be discharged and [a]ffect water quality in the receiving waters." U.S. EPA, NPDES Permit # LA0068420 Statement of Basis. As a result, EPA reiterated its authority to regulate such groundwater discharges "[t]o *protect surface water quality* from the deleterious effects of these discharges." *Id.* (emphasis added).

Moreover, because the CWA prohibits "*any* addition of any pollutant to navigable waters from any point source," 33 U.S.C. § 1362 (12) (emphasis added), EPA has exercised its CWA authority to regulate the leaching of contaminants from impoundments to hydrologically-connected groundwater even where the receiving surface water did not exceed applicable surface water quality standards ("WQS") and insufficient information existed to document that direct discharges to those surface waters exceeded the applicable WQS. *See* U.S. EPA, Report on Hydrological Connection Associated with Molycorp Mining Activity, *supra*, at 3.

EPA's interpretation of the scope of the CWA is entitled to deference. *Chevron U.S.A. Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984); *U.S. v. Mead*, 533 U.S. 218, 226-28 (2001); *accord U.S. v. W.R. Grace & Co.*, 429 F.3d 1224, 1237 (9th Cir. 2005).

In addition to EPA, "[t]he majority of courts have held that groundwaters that are hydrologically connected to surface waters are regulated waters of the United States, and that unpermitted discharges into such groundwaters are prohibited under section 1311." *Friends of Santa Fe County v. LAC Minerals, Inc.*, 892 F. Supp. 1333, 1358 (D.N.M. 1995).

These rulings include three recent decisions of United States District Courts in the Fourth Circuit. *Sierra Club v. Virginia Elec. & Power Co.*, --- F.Supp.3d ---, 2015 WL 6830301 (E.D. Va. Nov. 6, 2015); *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, --- F.Supp.3d ---, 2015 WL 6157706 (M.D.N.C. Oct. 20, 2015); *Ohio Valley Envtl. Coal. Inc. v. Pocahontas Land Corp.*, No. CIV.A. 3:14-11333, 2015 WL 2144905 (S.D.W. Va.) (May 7, 2015).

Numerous courts nationwide support this reasoning. *Waterkeeper All., Inc. v. U.S. E.P.A.*, 399 F.3d 486, 515 (2d Cir. 2005) (upholding EPA's case-by-case approach to regulating feedlot pollutant discharges to surface waters through connected groundwater); *Quivira Mining Co. v. U.S. EPA*, 765 F.2d 126, 130 (10th Cir. 1985) (finding CWA coverage where discharges ultimately affected navigable-in-fact streams via underground flows); *U.S. Steel Corp. v. Train*, 556 F.2d 822, 852 (7th Cir. 1977) (CWA "authorizes EPA to regulate the disposal of pollutants into deep wells, at least when the regulation is undertaken in conjunction with limitations on the permittee's discharges into surface waters."); *San Francisco Herring Ass'n v. Pac. Gas & Elec. Co.*, 81 F. Supp. 3d 847, 863 (N.D. Cal. 2015) (CWA jurisdiction over pollutant discharges through groundwater conduit to navigable waters); *Hawai'i Wildlife Fund v. Cty. of Maui*, 24 F. Supp. 3d 980, 996 (D. Haw. 2014) (where groundwater acts as a conduit conveying point source pollution, discharge "is functionally one into navigable water" subject to CWA liability); *Raritan Baykeeper, Inc. v. NL Indus., Inc.*, No. 09-CV-4117 JAP, 2013 WL 103880, at *15 (D.N.J. Jan. 8, 2013) (CWA covers hydrologically connected groundwater); *Ass'n Concerned Over Res. & Nature, Inc. v. Tennessee Aluminum Processors, Inc.*, No. 1:10-00084, 2011 WL 1357690, at *17 (M.D. Tenn. Apr. 11, 2011) (groundwater impacting federal waters is subject to the CWA); *Greater Yellowstone Coal. v. Larson*, 641 F. Supp. 2d 1120, 1138 (D. Idaho 2009) ("there is little dispute that if the ground water is hydrologically connected to surface water, it can be subject to" the CWA); *Nw. Envtl. Def. Ctr. v. Grabhorn, Inc.*, 2009 U.S. Dist. LEXIS 101359, *34 (D. Or. 2009) ("In light of the EPA's regulatory pronouncements, this court concludes that . . . the CWA covers discharges to navigable surface waters via hydrologically connected groundwater."); *Hernandez v. Esso Std. Oil Co. (P.R.)*, 599 F. Supp. 2d 175, 181 (D.P.R. 2009) ("the CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States"); *Coldani v. Hamm*, 2007 U.S. Dist. LEXIS 62644, *25 (E.D. Cal. Aug. 14, 2007) (a claim that pollution of groundwater that is hydrologically connected to navigable surface waters falls within the purview of the CWA); *N. Cal. Riverwatch v. Mercer Fraser Co.*, 2005 U.S. Dist. LEXIS 42997, *7 (N.D. Cal. Sept. 1, 2005) ("the regulations of the CWA do encompass the discharge of pollutants from wastewater basins to navigable waters via connecting groundwaters"); *Sierra Club, Mineral Policy Ctr. v. El Paso Gold Mines, Inc.*, No. CIV.A.01 PC 2163 OES, 2002 WL 33932715, at *10 (D. Colo. Nov. 15, 2002) (citing EPA policy statement that "discharges from mine adits at historic or active mines [including seeps and other groundwater discharges hydrologically connected to surface water from mines] are point sources subject to CWA liability for any amount of unpermitted discharge); *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001) ("the CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States"); *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319-20 (S.D. Iowa 1997) (where groundwater flows toward surface waters, there is "more than the mere possibility that pollutants discharged into groundwater will enter 'waters of the United States,'" and discharge of petroleum into this hydrologically-connected

groundwater violates the CWA); *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994) ("since the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation" under the CWA); *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1434 (D. Colo. 1993) ("discharge of any pollutant into 'navigable waters' includes such discharge which reaches 'navigable waters' through groundwater"); *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182, 1195-96 (E.D. Cal. 1988) (groundwater that is "naturally connected to surface waters that constitute 'navigable waters'" is covered by CWA)), *vacated on other grounds*, 47 F.3d 325 (9th Cir. 1995); *State of N.Y. v. United States*, 620 F. Supp. 374, 381 (E.D.N.Y. 1985) (groundwater discharges threatening navigable waters subject to CWA).

The reasoning behind these decisions is straightforward:

> Congress has explicitly stated that the objective of the CWA "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Therefore, *it would hardly make sense for the CWA to encompass a polluter who discharges pollutants via a pipe running from the factory directly to the riverbank, but not a polluter who dumps the same pollutants into a man-made settling basin some distance short of the river and then allows the pollutants to seep into the river via the groundwater.*

N. Cal. Riverwatch, 2005 U.S. Dist. LEXIS 42997 at *7-8 (internal citation omitted) (emphasis added). That is precisely the situation at Mayo, and accordingly the Clean Water Act applies to Duke Energy's unpermitted discharges from the Mayo coal ash lagoon that discharge contaminated groundwater into Crutchfield Branch, Mayo Lake, and adjacent wetlands.

Because these hydrologically connected discharges from the unlined coal ash lagoon to navigable waters of the United States are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

VIII. Failure to Properly Operate and Maintain

Part 1C, Section C.1 of the NPDES permit provides: "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this individual permit." Part II, Section C.2 similarly provides: "The Permittee shall at all times provide the operation and maintenance resources necessary to operate the existing facilities at optimum efficiency. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this individual permit." Attachment 2.

As set out above, Duke Energy has repeatedly and in a variety of ways violated the NPDES permit. Its wastewater treatment facility and systems leak, malfunction, pollute, and otherwise violate the conditions of the permit. All the permit violations set out above are also violations of these basic permit requirements to properly operate and maintain a wastewater facility and systems.

Because these violations are continuous and ongoing, they will continue after the date of this letter and the subsequent filing of a lawsuit.

PERSONS RESPONSIBLE FOR VIOLATIONS

Mayo is owned and operated by Duke Energy. Duke Energy is a corporation with its principal place of business in North Carolina. Duke Energy is responsible for all violations at Mayo.

PERSONS GIVING NOTICE

The Roanoke River Basin Association (the "Association") is a § 501(c)(3) non-profit public interest organizations with members in North Carolina and Virginia operating in the Roanoke River Basin watershed.

The Association and its members have been harmed by Duke Energy's unpermitted discharges and unlawful activities. They recreate, fish, and own property in the Roanoke River Basin, including in the vicinity of and downstream from Mayo, including Crutchfield Branch and Mayo Lake and the waterways into which they discharge and into which their waters flow. They fear contamination of drinking water, wildlife, and river water, by discharges from Duke Energy's coal ash lagoon. Duke Energy's discharges of pollutants and contaminants from the Mayo ash lagoon are reducing the use and enjoyment by the Association and its members of the Roanoke River Basin, Mayo Lake, Crutchfield Branch, and the waterways into which their waters flow.

The names, addresses, and phone numbers of the persons giving notice are:

Andrew Lester, Executive Director
Roanoke River Basin Association
150 Slayton Avenue
Danville, Virginia 24540
(434) 766-6727.

The Association believes that a negotiated settlement of these violations, codified through a court-approved consent decree, would be preferable to protracted litigation. However, if we are unable to reach an enforceable settlement agreement, the Association is prepared to file suit in the United States District Court for the Middle District of North Carolina, or other appropriate court, pursuant to § 505(a) of the Clean Water Act. 33 U.S.C. § 1365(a)(1), after sixty days from the date of this letter. This lawsuit will seek injunctive relief, appropriate monetary penalties, fees and costs of litigation, and such other relief as the Court deems appropriate.

If you have any questions concerning this letter or the described violations, or if you believe this notice is incorrect in any respect, please contact the undersigned counsel, the Southern Environmental Law Center, at (919) 967-1450 (tel.), (919) 929-9421 (fax). During the notice period, we are available to discuss this matter with you, but suggest if you desire to

institute negotiations in lieu of a civil action that you do so immediately as we do not intend to delay prosecution of this suit once the notice period has expired. Please be advised that the failure to remedy any of the violations set forth in this letter can result in a court order enjoining further violations and imposing civil penalties of $37,500 per violation, per day for each violation of the Clean Water Act. In addition, upon the successful prosecution of this suit, the Conservation Groups intend to seek compensation for attorneys' fees and the costs of litigation under the citizen suit provisions of the Clean Water Act, 33 U.S.C. § 1365.

Thank you for your prompt attention to this matter.

Sincerely,

Frank S. Holleman III
fholleman@selcnc.org

Nicholas S. Torrey
ntorrey@selcnc.org

Enclosures

cc:
Via certified mail – return receipt requested:

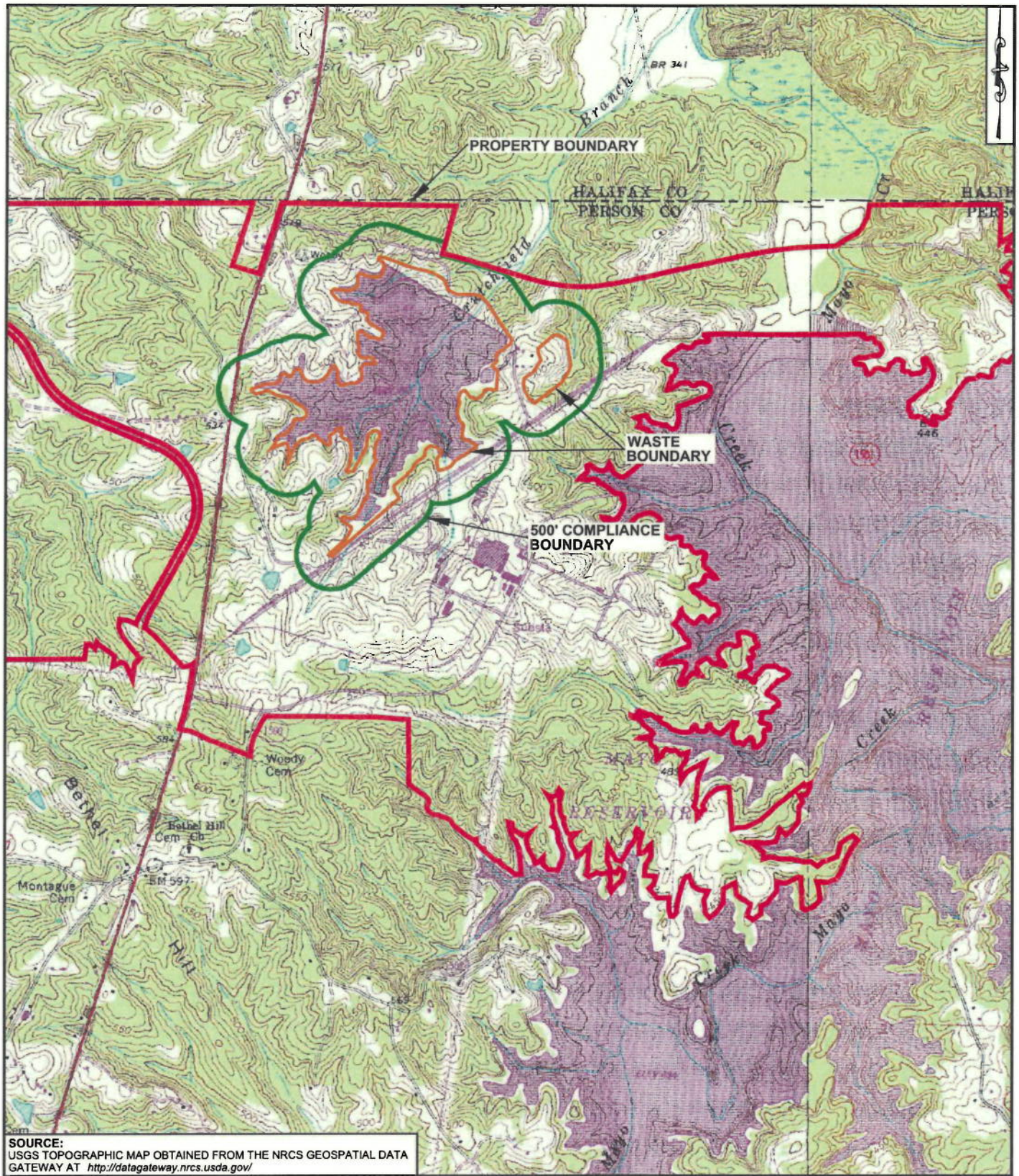
Heather McTeer Toney, Regional Administrator, U.S. EPA, Region 4
Roy Cooper, North Carolina Attorney General
CT Corporation System

Via e-mail:

Mary Wilkes, U.S. EPA, Region 4
Mark Nuhfer, U.S. EPA, Region 4
Karrie-Jo Shell, U.S. EPA, Region 4
Gina Fonzi, U.S. EPA, Region 4
Matthew Hicks, U.S. EPA, Region 4

Attachment 1

Figure 1-1 Site Location Map



SOURCE:
USGS TOPOGRAPHIC MAP OBTAINED FROM THE NRCS GEOSPATIAL DATA GATEWAY AT *http://datagateway.nrcs.usda.gov/*

synTerra
148 RIVER STREET, SUITE 220
GREENVILLE, SOUTH CAROLINA
PHONE 864-421-9999
www.synterracorp.com

FIGURE 1-1
SITE LOCATION MAP
MAYO STEAM ELECTRIC PLANT
10660 BOSTON RD
ROXBORO, NORTH CAROLINA
CLUSTER SPRINGS, VA QUADRANGLE

DRAWN BY: J. CHASTAIN
PROJECT MANAGER: K. WEBB
LAYOUT: FIG 1 (SITE LOCATION MAP)
DATE: 2014-12-22
CONTOUR INTERVAL: 10ft
MAP DATE: 1987

GRAPHIC SCALE
1000 0 1000 2000
IN FEET

08/28/2015 11:31 AM P:\Duke Energy Progress.1026\105 Mayo Ash Basin GW Assessment Plan\1.11 CSA Reporting\Figures\FIGURE 1-1 (USGS SITE LOCATION).dwg

Attachment 2

Modification to NPDES Permit NC0038377
October 2009

North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director

Dee Freeman
Secretary

October 14, 2009

Mr. Eric Northeim
Plant Manager
Progress Energy Carolinas, Inc.
Mayo Steam Plant
10660 Boston Road
Roxboro, North Carolina 27574

Subject: Modification to NPDES Permit
NC0038377
Progress Energy Mayo Steam Plant
Person County

Dear Mr. Northeim:

Division personnel have reviewed and approved your application for modification of the subject permit to add a new Stormwater Outfall 010. Accordingly, we are forwarding the attached NPDES discharge permit. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

There are several changes to this permit from your current permit:

- A new stormwater outfall, 010 has been added due to new industrial use of the plant's haul road. In conjunction with this change, the stormwater permitting unit has updated the stormwater portion of the permit to reflect their current practices.
- Wording has been added to the supplement to the cover page to include reject water from a reverse osmosis water purification system into the low volume wastes discharged to the ash pond (Outfall 002). The addition of a reverse osmosis water purification system is an industrial operation with no wastewater treatment component, so an Authorization to Construct from Construction Grants and Loans is not required.
- Footnotes for A.(4) Outfall 002 with FGD wastewater were revised to clear up compliance schedule inconsistencies.
- The monitoring frequency for flow in A. (5) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [009] has been increased to weekly from monthly at the request of the Raleigh Regional Office.

1617 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6495 \ Customer Service: 1-877-623-6748
Internet: www.ncwaterquality.org
An Equal Opportunity \ Affirmative Action Employer

- Footnotes on Special Conditions Pages have been revised to refer to Special Condition A.(10) instead of A.(13), due to some special conditions being moved to the stormwater section of the permit.
- Reference to the Mixing Zone has been removed from A.(4) and inserted into a new A.(11) which refers to monitoring requirements for chlorides at the mixing zone.

If any parts, measurement frequencies or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings (6714 Mail Service Center, Raleigh, North Carolina 27699-6714). Unless such demand is made, this decision shall be final and binding.

Please note that this permit is not transferable except after notice to the Division. The Division may require modification or revocation and reissuance of the permit. This permit does not affect the legal requirements to obtain other permits which may be required by the Division of Water Quality or permits required by the Division of Land Resources, the Coastal Area Management Act or any other Federal or Local governmental permit that may be required. If you have any questions concerning this permit, please contact Jim McKay at telephone number (919) 807-6404.

Sincerely,

for: Coleen H. Sullins

cc: Central Files
Raleigh Regional Office/Surface Water Protection - with fact sheet
NPDES Unit
EPA Region IV, Atlanta - with fact sheet
Aquatic Toxicology, Attn: Susan Meadows – *via email*
Stormwater Permitting Unit, Attn: Bethany Georgoulias – *via email*
Progress Energy Service Company, LLC/ P.O. Box 1551/ PEB 4A/ Raleigh, NC 27602/ Attn. Mr. Stephen G. Cahoon

1617 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6495 \ Customer Service: 1-877-623-6748
Internet: www.ncwaterquality.org
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STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY

PERMIT

TO DISCHARGE WASTEWATER UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

Carolina Power and Light d/b/a/ Progress Energy Carolinas, Inc.

is hereby authorized to discharge wastewater and stormwater from a facility located at the

Mayo Steam Electric Generating Plant
off of US Highway 501
northeast of Roxboro
Person County

to receiving waters designated as the Mayo Reservoir in the Roanoke River Basin in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, and IV hereof.

The permit shall become effective November 1, 2009.

This permit and the authorization to discharge shall expire at midnight on March 31, 2012.

Signed this day October 14, 2009.

for Coleen H. Sullins, Director
Division of Water Quality
By Authority of the Environmental Management Commission

SUPPLEMENT TO PERMIT COVER SHEET

All previous NPDES Permits issued to this facility, whether for operation or discharge are hereby revoked. As of this permit issuance, any previously issued permit bearing this number is no longer effective. Therefore, the exclusive authority to operate and discharge from this facility arises under the permit conditions, requirements, terms, and provisions included herein.

Carolina Power and Light d/b/a/ Progress Energy Carolinas, Inc.

is hereby authorized to:

1. Continue to operate the following systems located at Mayo Steam Electric Generating Plant, off of US Highway 501, northeast of Roxboro, Person County:

    - Cooling Tower System (Outfall 001). Less than once per year the cooling towers and circulating water system are drained by gravity and discharged directly to Mayo Reservoir.

    - Ash Pond Treatment System (Outfall 002). Outfall 002 discharges directly to Mayo Reservoir. The ash pond receives ash transport water, coal pile runoff, stormwater runoff, cooling tower blowdown, and various low volume wastes such as boiler blowdown, oily waste treatment, wastes/backwash from the water treatment processes including Reverse-Osmosis (RO) wastewater, plant area wash down water, equipment heat exchanger water, and treated domestic wastewater.

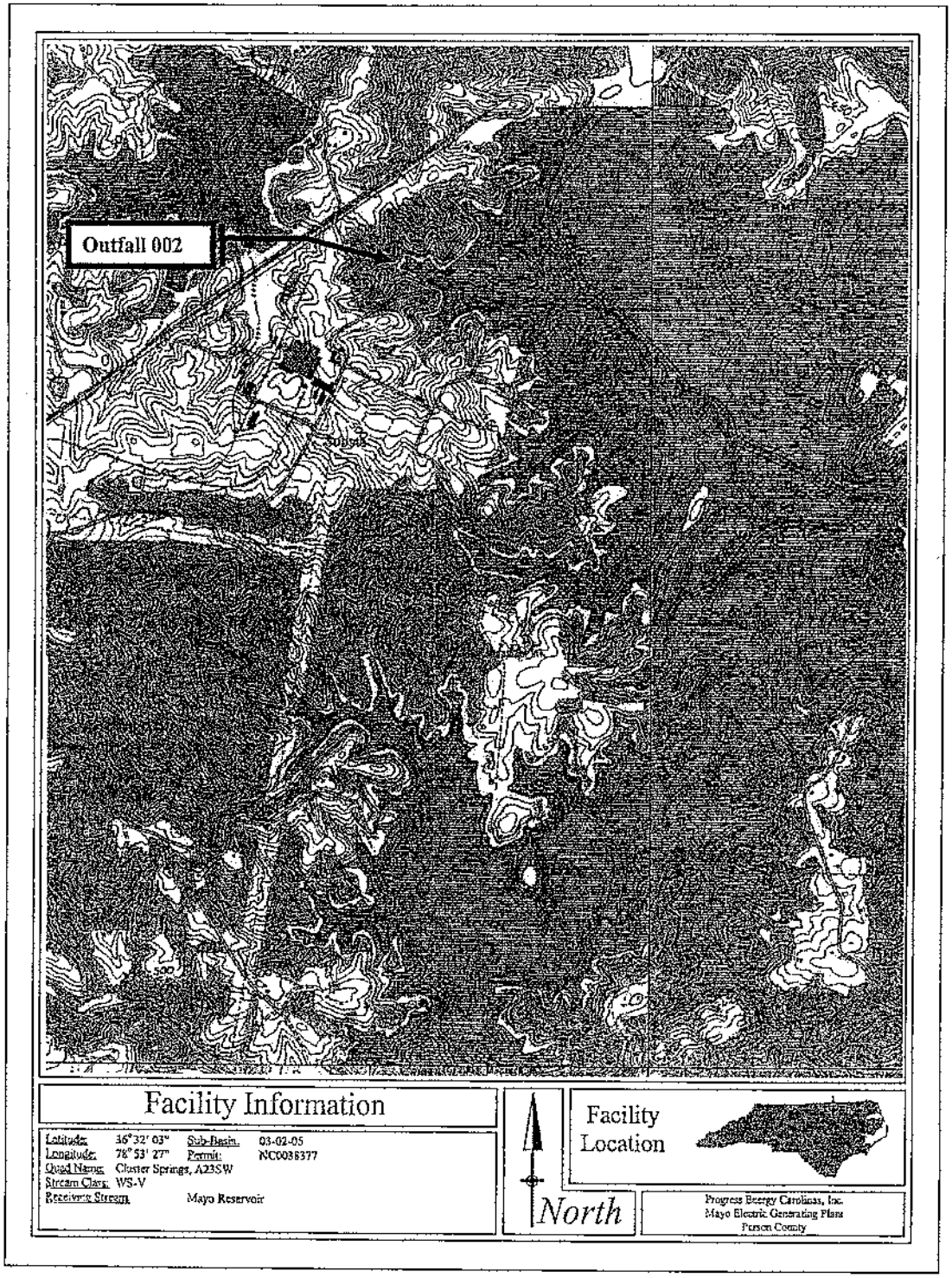
    - Internal Outfall 008. Cooling tower blowdown is directly discharged to the ash pond. Cooling tower blowdown is usually mixed with ash sluice water prior to discharge to the ash pond. Cooling tower blowdown is indirectly discharged to Mayo Reservoir via the ash pond treatment system (Outfall 002).

    - Internal Outfall 009. Discharge from the FGD blowdown treatment system. FGD blowdown is indirectly discharged to Mayo Reservoir via the ash pond treatment system (Outfall 002).

    - Stormwater Discharge System The facility is permitted to discharge stormwater to Mayo Reservoir through the following outfalls:

        - Outfall 004 - Drainage from the outside storage area.
        - Outfall 005 - Drainage from the industrial area and the oil/bottled gas storage area.
        - Outfalls 006a, 006b, 006c, 006d, 006e - Drainage from the cooling tower(s) chemical feed building structure and the cooling tower area.
        - Outfall 010 – Drainage from haul road for coal ash, limestone, gypsum, and gaseous anhydrous ammonia.

2. Discharge from said treatment works and/or outfalls at the locations specified on the attached maps into Mayo Reservoir, which is classified as WS-V waters in the Roanoke River Basin.



A. (1) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [001]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from Outfall 001 (Cooling Tower System). Monitoring is required only during discharge events to the Mayo reservoir. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow			Daily	Pump Logs or similar readings	Effluent
Free Available Chlorine[2]	200 µg/L	500 µg/L	Weekly	Grab	Effluent
Time of Chlorine Addition[2]		2 hours	Weekly	Logs	
Total Chromium[3]	0.2 mg/L	0.2 mg/L	2 / Month	Grab	Effluent
Total Zinc[3]	1.0 mg/L	1.0 mg/L	2 / Month	Grab	Effluent
Priority Pollutants [3]	No Detectable Amount		Annual	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units		Weekly	Grab	Effluent

Notes:
1. Samples taken in compliance with the monitoring requirements listed above shall consist of cooling tower effluent prior to its discharge to Mayo Reservoir.
2. Monitoring is required only if chlorine-based compounds is added to the system. Neither free available chlorine nor total residual chlorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Quality that discharge for more than two hours is required for macroinvertebrate control. The 500 µg/l limitation is an instantaneous maximum and is to be measured during the chlorine release period. The 200 µg/l limitation is an average during the chlorine release period. Simultaneous multi-unit chlorination is permitted.
3. Limitations and monitoring requirements for the 126 Priority Pollutants (per 40 CFR Part 423, Appendix A, exclusive of zinc and chromium) apply only if these substances are added by the permittee for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants in 40 CFR 423.13 (d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136. All primary industries are required to submit a priority pollutant analysis in accordance with 40 CFR Part 122 with their application for permit renewal.

The above listed effluent limitations shall be sampled prior to draining the cooling tower(s), at a location prior to discharge to Mayo Reservoir.

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (2) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [008]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from Outfall 008 (internal outfall, Cooling Tower System). Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow			Daily	Pump Logs or similar readings	Effluent
Free Available Chlorine[2]	200 µg/L	500 µg/L	Weekly	Grab	Effluent
Time of Chlorine Addition[2]		2 hours	Weekly	Logs	
Total Chromium[3]	0.2 mg/L	0.2 mg/L	2 / Month	Grab	Effluent
Total Zinc[3]	1.0 mg/L	1.0 mg/L	2 / Month	Grab	Effluent
Priority Pollutants [3]	No Detectable Amount		Annual	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units		Weekly	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall consist of cooling tower blowdown after mixing with the fly and bottom ash, but prior to discharging into the ash pond.
2. Monitoring is required only if chlorine-based compound is added to the system. Neither free available chlorine nor total residual chlorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Quality that discharge for more than two hours is required for macroinvertebrate control. The 500 µg/l limitation is an instantaneous maximum and is to be measured during the chlorine release period. The 200 µg/l limitation is an average during the chlorine release period. Simultaneous multi-unit chlorination is permitted.
3. Limitations and monitoring requirements for the 126 Priority Pollutants (per 40 CFR Part 423, Appendix A, exclusive of zinc and chromium) apply only if these substances are added by the permittee for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants in 40 CFR 423.13 (d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136. All primary industries are required to submit a priority pollutant analysis in accordance with 40 CFR Part 122 with their application for permit renewal.

This outfall is not authorized to discharge directly to the Mayo Reservoir.

A. (3) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [002 without FGD wastewater]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from Outfall 002 (Ash Pond Treatment System). Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location [1]
Flow			Weekly	Pump Logs or similar readings	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	Effluent
Total Suspended Solids	30.0 mg/L	100.0 mg/L	Monthly	Grab	Effluent
Total Selenium[2]		3.8 lbs/day	2 / Month	Grab	Effluent
Acute Toxicity[3]			Quarterly	Grab	Effluent
Total Arsenic[4]			Quarterly	Grab	Effluent
Total Copper			Quarterly	Grab	Effluent
Total Iron			Quarterly	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units		2 / Month	Grab	Effluent

Notes:
1. Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other waste streams.
2. See A. (8).
3. Acute Toxicity (Fathead Minnow 24hr) No significant mortality at 90%; February, May, August, and November, See A. (6).
4. See A. (10).

After the FGD treatment system is used to treat FGD wastewater, the effluent limits in Conditions A. (4). and A. (5). apply.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside an area five(5) meters from the discharge pipe. No chemical metal cleaning waste may be discharged to the ash pond. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (4) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [002 with FGD wastewater]

During the period beginning upon commencement of the FGD treatment system to treat FGD wastewater and lasting until expiration, the Permittee is authorized to discharge from *Outfall 002 (Ash Pond Treatment System)*. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow				Weekly	Pump Logs or similar readings	Effluent
Oil and Grease	15.0 mg/L		20.0 mg/L	Monthly	Grab	Effluent
Total Suspended Solids	30.0 mg/L		100.0 mg/L	Monthly	Grab	Effluent
Total Selenium			3.8 lbs/day	Weekly	Grab	Effluent
Acute Toxicity [3]				Quarterly	Grab	Effluent
Total Mercury [4]			0.012 µg/L	Weekly	Grab	Effluent
Total Arsenic [5]				Weekly	Grab	Effluent
Total Beryllium [2]		6.5 µg/L		Weekly	Grab	Effluent
Total Cadmium [2]		2.0 µg/L		Weekly	Grab	Effluent
Total Chlorides [2]		672.0 mg/L	860.0 mg/L	Weekly	Grab	Effluent
Total Chromium [2]		50.0 µg/L		Weekly	Grab	Effluent
Total Copper				Weekly	Grab	Effluent
Total Fluoride [2]		1.8 mg/L		Weekly	Grab	Effluent
Total Lead [2]		25.0 µg/L	33.8 µg/L	Weekly	Grab	Effluent
Total Manganese [2]		200.0 µg/L		Weekly	Grab	Effluent
Total Nickel				Weekly	Grab	Effluent
Total Silver				Weekly	Grab	Effluent
Total Zinc				Weekly	Grab	Effluent
Total Barium [2]		1.0 mg/L		Weekly	Grab	Effluent
Total Thallium [2]		0.35 µg/L		Weekly	Grab	Effluent
Total Vanadium [2]		24.0 µg/L		Weekly	Grab	Effluent
Total Antimony [2]		5.6 µg/L		Weekly	Grab	Effluent
Total Boron [2]		750.0 µg/L		Weekly	Grab	Effluent
Total Cobalt [2]		65.0 µg/L		Weekly	Grab	Effluent
Total Molybdenum [2]		170 µg/L		Weekly	Grab	Effluent
Total Iron				Quarterly	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units			2 / Month	Grab	Effluent

Notes: See next page

A (4) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [002 with FGD wastewater] Continued

1. Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other waste streams.
2. The limit becomes applicable 24 months after commencement of the FGD system. Monitoring is required upon initial commencement of the FGD system.
3. Acute Toxicity (Fathead Minnow 24-hr) No significant mortality at 90%; February, May, August, and November [see A. (6)].
4. The mercury limit will take effect one year after commencement of the FGD system to treat FGD wastewater. Monitoring is required upon initial commencement of the FGD system.
5. See A. (10).

Progress Energy shall inform this office as well as the Raleigh Regional Office, via phone call and via letter, as to when the FGD treatment system will be used to treat FGD wastewater.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside an area five (5) meters from the discharge pipe. No chemical metal cleaning waste may be discharged to the ash pond. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (5) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [009]

During the period beginning *upon commencement of the FGD treatment system to treat FGD wastewater* and lasting until expiration, the Permittee is authorized to discharge from Internal Outfall 009 (treated FGD wet scrubber wastewater). Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow			Weekly	Instantaneous	E
Total Suspended Solids			Weekly	Grab	E
Total Mercury			Weekly	Grab	E
Total Selenium			Weekly	Grab	E
Total Arsenic			Weekly	Grab	E
Total Beryllium			Weekly	Grab	E
Total Cadmium			Weekly	Grab	E
Total Chlorides			Weekly	Grab	E
Total Chromium			Weekly	Grab	E
Total Copper			Weekly	Grab	E
Total Fluoride			Weekly	Grab	E
Total Lead			Weekly	Grab	E
Total Manganese			Weekly	Grab	E
Total Nickel			Weekly	Grab	E
Total Silver			Weekly	Grab	E
Total Barium			Weekly	Grab	E
Total Thallium			Weekly	Grab	E
Total Vanadium			Weekly	Grab	E
Total Antimony			Weekly	Grab	E
Total Boron			Weekly	Grab	E
Total Cobalt			Weekly	Grab	E
Total Molybdenum			Weekly	Grab	E
Total Zinc			Weekly	Grab	E

Notes:

1. E – Effluent from the FGD treatment system prior to discharge to the Ash Pond.

A. (6) ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (Quarterly)
Outfall 002 (Ash Pond)

The permittee shall conduct acute toxicity tests on a *quarterly* basis using protocols defined in the North Carolina Procedure Document entitled "Pass/Fail Methodology For Determining Acute Toxicity In A Single Effluent Concentration" (Revised-July, 1992 or subsequent versions). The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24 hour static test. The effluent concentration at which there may be at no time significant acute mortality is 90% (defined as treatment two in the procedure document). Effluent samples for self-monitoring purposes must be obtained during representative effluent discharge below all waste treatment. The tests will be performed during the months of February, May, August and November.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month in which it was performed, using the parameter code TGE6C. Additionally, DWQ Form AT-2 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Quality
Environmental Sciences Section
1621 Mail Service Center
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county, and the month/year of the report with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Environmental Sciences Section at the address cited above.

Should any single quarterly monitoring indicate a failure to meet specified limits, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Quality indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival and appropriate environmental controls, shall constitute an invalid test and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

A. (7) SELENIUM STUDY

The Permittee shall conduct biological and physical/chemical studies on selenium and its effect in the reservoir. The results shall be submitted each year by May 1 for the prior calendar year. The plan of study shall be submitted to the Director of the Division of Water Quality for approval.

A. (8) CRUTCHFIELD BRANCH

There shall be no direct discharge of wastewater from the ash pond to Crutchfield Branch. There shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharge from the ash pond. The Permittee shall monitor the waters of Crutchfield Branch, 100 yards downstream of the dike, once per year by grab sample for the following: arsenic, copper, and selenium.

A. (9) DOMESTIC WASTEWATER TREATMENT PLANT

The domestic wastewater treatment plant shall be properly operated and maintained to ensure treatment of domestic wastewater to secondary levels.

A. (10) FISH TISSUE SAMPLING

Progress Energy shall conduct fish tissue sampling for Arsenic on an annual basis. The fish tissue sampling plan shall be approved by the Division's Environmental Sciences Section prior to commencement of sampling.

A. (11) MIXING ZONE SAMPLING

PARAMETER	LIMITS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Total Chlorides				Weekly	Grab	Mixing Zone

Instream sampling for chlorides is required at the edge of the mixing zone, 200 meters linear distance from the discharge point. The boat dock on Mayo Lake near the discharge point has been approved by DWQ as an acceptable monitoring point for the mixing zone. Monitoring shall begin upon commencement of the FGD system and shall last for 5 years.

B. (1) STORMWATER PERMIT REQUIREMENTS

Section A: Individual Permit Coverage

During the period beginning on the effective date of the permit and lasting until expiration, the permittee is authorized to discharge stormwater associated with industrial activity. Such discharges shall be controlled, limited and monitored as specified in this permit.

If industrial materials and activities are not exposed to precipitation or runoff as described in 40 CFR §122.26(g), the facility may qualify for a No Exposure Exclusion from NPDES stormwater discharge permit requirements. Any owner or operator wishing to obtain a No Exposure Certification must submit a No Exposure Certification NOI form to the Division; must receive approval by the Division; must maintain no exposure conditions unless authorized to discharge under a valid NPDES stormwater permit; and must reapply for the No Exposure Exclusion once every five (5) years.

Section B: Permitted Activities

Until this permit expires or is modified or revoked, the permittee is authorized to discharge stormwater to the surface waters of North Carolina or separate storm sewer system that has been adequately treated and managed in accordance with the terms and conditions of this individual permit. All stormwater discharges shall be in accordance with the conditions of this permit.

Any other point source discharge to surface waters of the state is prohibited unless it is an allowable non-stormwater discharge or is covered by this or another permit, authorization, or approval. The stormwater discharges allowed by this individual permit shall not cause or contribute to violations of Water Quality Standards.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

B. (2) STORMWATER POLLUTION PREVENTION PLAN

The Permittee shall develop a Stormwater Pollution Prevention Plan, herein after referred to as the Plan. This Plan shall be considered public information in accordance with Part III, Standard Conditions, Section E, Paragraph 3 of this individual permit. The Plan shall include, at a minimum, the following items:

1. Site Plan. The site plan shall provide a description of the physical facility and the potential pollutant sources which may be expected to contribute to contamination of stormwater discharges. The site plan shall contain the following:

    (a) A general location map (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters, the name of the receiving water(s) to which the stormwater outfall(s) discharges, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters, and accurate latitude and longitude of the point(s) of discharge. The general location map (or alternatively the site map) shall identify whether each receiving water is impaired (on the state's 303(d) list of impaired waters) or is located in a watershed for which a TMDL has been established, and what the parameter(s) of concern are.
    North Carolina's 303(d) List can be found here:
    http://h2o.enr.state.nc.us/tmdl/General_303d.htm#Downloads

North Carolina TMDL documents can be found here: http://h2o.enr.state.nc.us/tmdl/TMDL_list.htm#Final_TMDLs.

(b) A narrative description of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. A narrative description of the potential pollutants which could be expected to be present in the stormwater discharge from each outfall.

(c) A site map drawn to scale (including a distance legend) showing: the site property boundary, the stormwater discharge outfalls, all on-site and adjacent surface waters and wetlands, industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, and haul roads), site topography, all drainage features and structures, drainage areas for each outfall, direction of flow in each drainage area, industrial activities occurring in each drainage area, buildings, existing BMPs, and impervious surfaces. The site map must indicate the percentage of each drainage area that is impervious.

(d) A list of significant spills or leaks of pollutants that have occurred at the facility during the three (3) previous years and any corrective actions taken to mitigate spill impacts.

(e) Certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. The certification statement will be signed in accordance with the requirements found in Part III, Standard Conditions, Section B, Paragraph 5. The permittee shall re-certify annually that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges.

2. Stormwater Management Plan. The stormwater management plan shall contain a narrative description of the materials management practices employed which control or minimize the exposure of significant materials to stormwater, including structural and nonstructural measures. The stormwater management plan, at a minimum, shall incorporate the following:

(a) Feasibility Study. A review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to stormwater. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, the stormwater management plan shall document the feasibility of diverting the stormwater runoff away from areas of potential contamination.

(b) Secondary Containment Requirements and Records. Secondary containment is required for: bulk storage of liquid materials; storage in any amount of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage in any amount of hazardous substances, in order to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected directly to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism), and any stormwater that accumulates in the containment area shall be at a minimum visually observed for color, foam, outfall staining, visible sheens and dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by the material stored

within the containment area. Records documenting the individual making the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five years.

(c) BMP Summary. A listing of site structural and non-structural Best Management Practices (BMP) shall be provided. The installation and implementation of BMPs shall be based on the assessment of the potential for sources to contribute significant quantities of pollutants to stormwater discharges and data collected through monitoring of stormwater discharges. The BMP Summary shall include a written record of the specific rationale for installation and implementation of the selected site BMPs. The BMP Summary shall be reviewed and updated annually.

3. Spill Prevention and Response Plan. The Spill Prevention and Response Plan (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel (or the team) responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP and signed and dated by each individual acknowledging their responsibilities for the plan. A responsible person shall be on-site at all times during facility operations that have the potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific. Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP.

4. Preventative Maintenance and Good Housekeeping Program. A preventative maintenance and good housekeeping program shall be developed. The program shall list all stormwater control systems, stormwater discharge outfalls, all on-site and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural BMPs. The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Timely compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded in writing and maintained in the SPPP.

5. Employee Training. Training programs shall be developed and training provided at a minimum on an annual basis for facility personnel with responsibilities for: spill response and cleanup, preventative maintenance activities, and for any of the facility's operations that have the potential to contaminate stormwater runoff. Facility personnel (or team) responsible for implementing the training shall be identified, and their annual training shall be documented by the signature of each employee trained.

6. Responsible Party. The Stormwater Pollution Prevention Plan shall identify a specific position(s) responsible for the overall coordination, development, implementation, and revision to the Plan. Responsibilities for all components of the Plan shall be documented and position assignments provided.

7. Plan Amendment. The permittee shall amend the Plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to surface waters. All aspects of the Stormwater Pollution Prevention Plan shall be reviewed and updated on an annual basis. The annual update shall include an updated list of significant spills or leaks of pollutants for the previous

three years, or the notation that no spills have occurred. The annual update shall include re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. Each annual update shall include a re-evaluation of the effectiveness of the BMPs listed in the BMP Summary of the Stormwater Management Plan.

The Director may notify the permittee when the Plan does not meet one or more of the minimum requirements of the permit. Within 30 days of such notice, the permittee shall submit a time schedule to the Director for modifying the Plan to meet minimum requirements. The permittee shall provide certification in writing (in accordance with Part III, Standard Conditions, Section B, Paragraph 5) to the Director that the changes have been made.

8. Facility Inspections. Inspections of the facility and all stormwater systems shall occur as part of the Preventative Maintenance and Good Housekeeping Program at a minimum on a semi-annual schedule, once during the first half of the year (January to June), and once during the second half (July to December), with at least 60 days separating inspection dates (unless performed more frequently than semi-annually). These facility inspections are different from, and in addition to, the stormwater discharge characteristic monitoring required in Part II B and C of this permit.

9. Implementation. The permittee shall implement the Plan. Implementation of the Plan shall include documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees, including the log of the sampling data and of actions taken to implement BMPs associated with the industrial activities, including vehicle maintenance activities. Such documentation shall be kept on-site for a period of five years and made available to the Director or the Director's authorized representative immediately upon request.

B. (3) ANALYTICAL MONITORING REQUIREMENTS

Analytical monitoring of stormwater discharges shall be performed as specified in Table 1 of the Stormwater Section of this permit. All analytical monitoring shall be performed during a representative storm event. The required monitoring will result in a minimum of five (5) analytical samplings being conducted over the term of the permit at Outfall 010.

A representative storm event is a storm event that measures greater than 0.1 inches of rainfall. The time between this storm event and the previous storm event measuring greater than 0.1 inches must be at least 72 hours. A single storm event may have a period of no precipitation of up to 10 hours. For example, if it rains but stops before producing any collectable discharge, a sample may be collected if the next rain producing a discharge begins within 10 hours

Table 1. Analytical Monitoring Requirements for Outfall 010

Discharge Characteristics	Units	Measurement Frequency[1]	Sample Type[2]	Sample Location[3]
40 CFR Part 423 Appendix A: 13 Priority Pollutant Metals[5] (Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn)[4]	µg/l	semi-annual	Grab	010
Al	µg/l	semi-annual	Grab	010
B	µg/l	semi-annual	Grab	010
COD	mg/l	semi-annual	Grab	010
TSS	mg/l	semi-annual	Grab	010
Sulfate	mg/l	semi-annual	Grab	010
Oil and Grease (O&G)	mg/l	Semi-annual	Grab	010
pH	Standard	semi-annual	Grab	010
Total Rainfall[5]	inches	semi-annual	Rain Gauge	-

Footnotes:

1 Measurement Frequency: Twice per year during a representative storm event, for each year until either another permit is issued for this facility or until this permit is revoked or rescinded. If at the end of this permitting cycle the permittee has submitted the appropriate paperwork for a renewal permit before the submittal deadline, the permittee will be considered for a renewal application. The applicant must continue semi-annual monitoring until the renewed permit is issued. See *Table 2* for schedule of monitoring periods through the end of this permitting cycle.

2 If the stormwater runoff is controlled by a stormwater detention pond, a grab sample of the discharge from the pond shall be collected within the first 30 minutes of discharge.

3 Sample Location: Samples shall be collected at each stormwater discharge outfall (SDO) unless representative outfall status has been granted.

4 Mercury shall be analyzed by EPA Low-level detection method 1631E. This method requires a field blank also be analyzed. A benchmark does not apply; however, values above 0.012 µg/l (12 ng/l) should be flagged on SDO DMR reports.

5 For each sampled representative storm event the total precipitation must be recorded. An on-site rain gauge or local rain gauge reading must be recorded.

The permittee shall complete the minimum five (5) analytical samplings in accordance with the schedule specified below in *Table 2*. A *minimum of 60 days must separate Period 1 and Period 2 sample dates* unless monthly monitoring has been instituted under a Tier Two response.

Table 2. Monitoring Schedule

Monitoring Period	Sample Number	Start	End
Year 1 – Period 1	1	January 1, 2010	June 30, 2010
Year 1 – Period 2	2	July 1, 2010	December 31, 2010
Year 2 – Period 1	3	January 1, 2011	June 30, 2011
Year 2 – Period 2	4	July 1, 2011	December 31, 2011
Year 2 – Period 1	5	January 1, 2012	March 31, 2012

Footnotes:
1 Maintain semi-annual monitoring during permit renewal process. The applicant must continue quarterly monitoring until the renewed permit is issued.
2 If no discharge occurs during the sampling period, the permittee must submit a monitoring report indicating "No Flow" within 30 days of the end of the six-month sampling period.

The permittee shall report the analytical results from the first sample with valid results within the monitoring period. The permittee shall compare monitoring results to the benchmark values in Table 3. The benchmark values in Table 3 are not permit limits but should be used as guidelines for the permittee's Stormwater Pollution Prevention Plan (SPPP). Exceedences of benchmark values require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater Best Management Practices (BMPs) in a tiered program. See below the descriptions of Tier One and Tier Two.

Table 3. Benchmark Values for Analytical Monitoring

Pollutant Characteristic	Units	Benchmark
Aluminum	mg/l	0.75
Antimony	mg/l	0.09
Arsenic	mg/l	0.36
Beryllium	mg/l	0.07
Boron	mg/l	N/A
Cadmium	mg/l	0.001
Calcium	mg/l	N/A
Chromium	mg/l	1
Copper	mg/l	0.007
Lead	mg/l	0.03
Mercury	ng/l	N/A
Nickel	mg/l	0.26
Selenium	mg/l	0.056
Silver	mg/l	0.001
Thallium	mg/l	N/A
Zinc	mg/l	0.067
COD	mg/l	120
TSS	mg/l	100
Sulfate	mg/l	500
O&G	mg/l	30
pH (*see footnote 1*)	Standard	6 - 9[1]

Footnotes:

1 If pH values outside this range are recorded in sampled stormwater discharges, but ambient rainfall data indicate precipitation pH levels are within $\pm$ 0.1 standard units of the measured discharge values or lower, then the lower threshold of this benchmark range does not apply. Readings from an on-site or local rain gauge (or local precipitation data) must be documented to demonstrate background concentrations were below the benchmark pH range.

Tier One
If: The first valid sampling results are above a benchmark value, or outside of the benchmark range, for any parameter at any outfall;
Then: The permittee shall: 1. Conduct a stormwater management inspection of the facility within two weeks of receiving sampling results. 2. Identify and evaluate possible causes of the benchmark value exceedence. 3. Identify potential, and select the specific: source controls, operational controls, or physical improvements to reduce concentrations of the parameters of concern, or to bring concentrations to within the benchmark range. 4. Implement the selected actions within two months of the inspection. 5. Record each instance of a Tier One response in the Stormwater Pollution Prevention Plan. Include the date and value of the benchmark exceedence, the inspection date, the personnel conducting the inspection, the selected actions, and the date the selected actions were implemented.

Tier Two
If: During the term of this permit, the first valid sampling results are above the benchmark values, or outside of the benchmark range, for any specific parameter at a specific discharge outfall two times in a row (consecutive);
Then: The permittee shall: 1. Repeat all the required actions outlined above in Tier One. 2. Immediately institute monthly monitoring for all parameters (except mercury) at every outfall where a sampling result exceeded the benchmark value for two consecutive samples. Monthly (analytical and qualitative) monitoring shall continue until three consecutive sample results are below the benchmark values, or within the benchmark range, for all parameters at that outfall. 3. If no discharge occurs during the sampling period, the permittee is required to submit a monthly monitoring report indicating "No Flow." 4. Maintain a record of the Tier Two response in the Stormwater Pollution Prevention Plan.

During the term of this permit, if the valid sampling results required for the permit monitoring periods exceed the benchmark value, or are outside the benchmark range, for any specific parameter at any specific outfall on four occasions, the permittee shall notify the DWQ Raleigh Regional Office Supervisor in writing within 30 days of receipt of the fourth analytical results. DWQ may, but is not limited to:

- require that the permittee increase or decrease the monitoring frequency for the remainder of the permit;
- work with the permittee to develop alternative response strategies;
- require the permittee to install structural stormwater controls;
- require the permittee to implement other stormwater control measures; or
- require that the permittee implement site modifications to qualify for the No Exposure Exclusion.

B. (4) QUALITATIVE MONITORING REQUIREMENTS

Qualitative monitoring requires a visual inspection of each stormwater outfall regardless of representative outfall status and shall be performed as specified in Table 4, during the analytical monitoring event. If analytical monitoring is not required, the permittee must still conduct semi-annual qualitative monitoring. Qualitative monitoring is for the purpose of evaluating the effectiveness of the Stormwater Pollution Prevention Plan (SPPP) and assessing new sources of stormwater pollution.

In the event an atypical condition is noted at a stormwater discharge outfall, the permittee shall document the suspected cause of the condition and any actions taken in response to the discovery. This documentation will be maintained with the SPPP.

Table 4 Qualitative Monitoring Requirements for all Stormwater Discharge Outfalls

Stormwater Discharge Characteristics	Measurement Frequency	Sample Location
Color	semi-annual	All Stormwater Discharge Outfalls, including 010
Odor	semi-annual	All Stormwater Discharge Outfalls, including 010
Clarity	semi-annual	All Stormwater Discharge Outfalls, including 010
Floating Solids	semi-annual	All Stormwater Discharge Outfalls, including 010
Suspended Solids	semi-annual	All Stormwater Discharge Outfalls, including 010
Foam	semi-annual	All Stormwater Discharge Outfalls, including 010
Oil Sheen	semi-annual	All Stormwater Discharge Outfalls, including 010
Other obvious indicators of stormwater pollution, such as erosion or deposition	semi-annual	All Stormwater Discharge Outfalls, including 010

Footnote:

1. Measurement Frequency. Qualitative monitoring will be performed twice per year, once in the spring (April - June) and once in the fall (September - November). For SDO 010, measurement frequency shall be twice per year during a representative storm event, for each year until either another permit is issued for this facility or until this permit is revoked or rescinded. If at the end of this permitting cycle the permittee has submitted the appropriate paperwork for a renewal permit before the submittal deadline, the permittee will be considered for a renewal application. The applicant must continue semi-annual monitoring of SDO 010 until the renewed permit is issued. See Table 2 for schedule of monitoring periods through the end of this permitting cycle.

PART 1C
STANDARD CONDITIONS FOR NPDES STORMWATER INDIVIDUAL PERMITS

SECTION A: COMPLIANCE AND LIABILITY

1. Compliance Schedule

The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

Existing Facilities already operating but applying for permit coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the initial permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit, shall be accomplished within 12 months of the effective date of the initial permit issuance.

New Facilities applying for coverage for the first time and existing facilities previously permitted and applying for renewal under this permit: The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

2. Duty to Comply

The permittee must comply with all conditions of this individual permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit upon renewal application.

a. The permittee shall comply with standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

b. The Clean Water Act provides that any person who violates a permit condition is subject to a civil penalty not to exceed $25,000 per day for each violation. Any person who negligently violates any permit condition is subject to criminal penalties of $2,500 to 25,000 per day of violation, or imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. Also, any person who violates a permit condition may be assessed an administrative penalty not to exceed $10,000 per violation with the maximum amount not to exceed $125,000. [Ref: Section 309 of the Federal Act 33 USC 1319 and 40 CFR 122.41(a).]

c. Under state law, a daily civil penalty of not more than ten thousand dollars ($10,000) per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [Ref: NC General Statutes 143-215.6A].

d. Any person may be assessed an administrative penalty by the Director for violating section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this individual permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Civil and Criminal Liability

Except as provided in Part III, Section C of this permit regarding bypassing of stormwater control facilities, nothing in this individual permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS l43-2l5.3, l43-2l5.6A, 143-215.6B, 143-215.6C or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

5. Oil and Hazardous Substance Liability

Nothing in this individual permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under NCGS l43-2l5.75 et seq. or Section 311 of the Federal Act, 33 USC 1321.

6. Property Rights

The issuance of this individual permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

7. Severability

The provisions of this individual permit are severable, and if any provision of this individual permit, or the application of any provision of this individual permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this individual permit, shall not be affected thereby.

8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this individual permit.

9. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this individual permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more that $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

10. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this individual permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both.

SECTION B: GENERAL CONDITIONS

1. Individual Permit Expiration

The permittee is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the permittee shall submit forms and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date. Any permittee that has not requested renewal at least 180 days prior to expiration, or any permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will be subjected to enforcement procedures as provided in NCGS §143-215.6 and 33 USC 1251 et. seq.

2. Transfers

This permit is not transferable to any person except after notice to and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name and incorporate such other requirements as may be necessary under the Clean Water Act. The Permittee is required to notify the Division in writing in the event the permitted facility is sold or closed.

3. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified.

a. All applications to be covered under this individual permit shall be signed as follows:

(1) In the case of a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(2) In the case of a partnership or limited partnership: by a general partner;

(3) In the case of a sole proprietorship: by the proprietor;

(4) In the case of a municipal, state, or other public entity: by a principal executive officer, ranking elected official, or other duly authorized employee.

b. All reports required by the individual permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

(3) The written authorization is submitted to the Director.

c. Any person signing a document under paragraphs a. or b. of this section shall make the following certification:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or

those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

4. Individual Permit Modification, Revocation and Reissuance, or Termination

The issuance of this individual permit does not prohibit the Director from reopening and modifying the individual permit, revoking and reissuing the individual permit, or terminating the individual permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 2H .0100; and North Carolina General Statute 143-215.1 et al.

5. Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The notification of planned changes or anticipated noncompliance does not stay any individual permit condition.

SECTION C: OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this individual permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this individual permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this individual permit.

3. Bypassing of Stormwater Control Facilities

Bypass is prohibited and the Director may take enforcement action against a permittee for bypass unless:

a. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage; and

b. There were no feasible alternatives to the bypass, such as the use of auxiliary control facilities, retention of stormwater or maintenance during normal periods of equipment downtime or dry weather. This condition is not satisfied if adequate backup controls should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under, Part III, Section E of this permit.

If the Director determines that it will meet the three conditions listed above, the Director may approve an anticipated bypass after considering its adverse effects.

SECTION D: MONITORING AND RECORDS

1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be characteristic of the volume and nature of the permitted discharge. Analytical sampling shall be performed during a representative storm event. Samples shall be taken on a day and time that is characteristic of the discharge. All samples shall be taken before the discharge joins or is diluted by any other waste stream, body of water, or substance. Monitoring points as specified in this permit shall not be changed without notification to and approval of the Director.

2. Recording Results

For each measurement, sample, inspection or maintenance activity performed or collected pursuant to the requirements of this individual permit, the permittee shall record the following information:

a. The date, exact place, and time of sampling, measurements, inspection or maintenance activity;

b. The individual(s) who performed the sampling, measurements, inspection or maintenance activity;

c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

3. Flow Measurements

Where required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to the EMC regulations published pursuant to NCGS 143-215.63 et. seq, the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the Federal Water Pollution Control Act, as Amended, and Regulation 40 CFR 136.
To meet the intent of the monitoring required by this individual permit, all test procedures must produce minimum detection and reporting levels and all data generated must be reported down to the minimum detection or lower reporting level of the procedure.

5. Representative Outfall

If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the permittee may petition the Director for representative outfall status. If it is established that the stormwater discharges are substantially identical and the permittee is granted representative outfall status, then sampling requirements may be performed at a reduced number of outfalls.

6. Records Retention

Visual monitoring shall be documented and records maintained at the facility along with the Stormwater Pollution Prevention Plan. Copies of analytical monitoring results shall also be maintained on-site. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this individual permit for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

7. Inspection and Entry

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), or in the case of a facility which discharges through a municipal separate storm sewer system, an authorized representative of a municipal operator or the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to;

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this individual permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this individual permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this individual permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring individual permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION E: REPORTING REQUIREMENTS

1. Discharge Monitoring Reports

Samples analyzed in accordance with the terms of this permit shall be submitted to the Division on Discharge Monitoring Report (DMR) forms provided by the Director. Submittals shall be delivered to the Division no later than 30 days from the date the facility receives the sampling results from the laboratory.

When no discharge has occurred from the facility during the report period, the permittee is required to submit a discharge monitoring report within 30 days of the end of the three or six-month sampling period (for VMA), giving all required information and indicating "NO FLOW" as per NCAC T15A 02B .0506.

The permittee shall record the required qualitative monitoring observations on the SDO Qualitative Monitoring Report (QMR) form provided by the Division, and shall retain the completed forms on site. Qualitative monitoring results should not be submitted to the Division, except upon DWQ's specific requirement to do so.

2. Submitting Reports

Duplicate signed copies of all reports required herein, shall be submitted to the following address:

Division of Water Quality
Surface Water Protection Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

3. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3(a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the Division of Water Quality. As required by the Act, analytical data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.6B or in Section 309 of the Federal Act.

4. Non-Stormwater Discharges

If the storm event monitored in accordance with this individual permit coincides with a non-stormwater discharge, the permittee shall separately monitor all parameters as required under the non-stormwater discharge permit and provide this information with the stormwater discharge monitoring report.

5. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned changes at the permitted facility which could significantly alter the nature or quantity of pollutants discharged. This notification requirement includes pollutants which are not specifically listed in the individual permit or subject to notification requirements under 40 CFR Part 122.42 (a).

6. Anticipated Noncompliance

The permittee shall give notice to the Director as soon as possible of any planned changes at the permitted facility which may result in noncompliance with the individual permit requirements.

7. Bypass

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and affect of the bypass.

b. Unanticipated bypass. The permittee shall submit notice within 24 hours of becoming aware of an unanticipated bypass.

8. Twenty-four Hour Reporting

The permittee shall report to the central office or the appropriate regional office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances.

The written submission shall contain a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

9. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under 24 hour reporting at the time monitoring reports are submitted.

10. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in an application for an individual permit or in any report to the Director, it shall promptly submit such facts or information.

PART 1D
LIMITATIONS REOPENER

This individual permit shall be modified or alternatively, revoked and reissued, to comply with any applicable effluent guideline or water quality standard issued or approved under Sections 302(b) (2) (c), and (d), 304(b) (2) and 307(a) of the Clean Water Act, if the effluent guideline or water quality standard so issued or approved:

a. Contains different conditions or is otherwise more stringent than any effluent limitation in the individual permit; or

b. Controls any pollutant not limited in the individual permit.

The individual permit as modified or reissued under this paragraph shall also contain any other requirements in the Act then applicable.

PART 1E
ADMINISTERING AND COMPLIANCE MONITORING FEE REQUIREMENTS

The permittee must pay the administering and compliance monitoring fee within 30 (thirty) days after being billed by the Division. Failure to pay the fee in timely manner in accordance with 15A NCAC 2H .0105(b)(4) may cause this Division to initiate action to revoke the Individual Permit.

PART 1F
DEFINITIONS

1. Act

   See Clean Water Act.

2. Arithmetic Mean

   The arithmetic mean of any set of values is the summation of the individual values divided by the number of individual values.

3. Allowable Non-Stormwater Discharges

   This permit regulates stormwater discharges. Non-stormwater discharges which shall be allowed in the stormwater conveyance system are:

   (a) All other discharges that are authorized by a non-stormwater NPDES permit.

   (b) Uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, flows from riparian habitats and wetlands, and until permit renewal in 2012 wash down water without added chemicals may be discharged for only outfalls 004, 005, 006a, 006b, 006c, 006d, 006e.

   (c) Discharges resulting from fire-fighting or fire-fighting training.

4. Best Management Practices (BMPs)

   Measures or practices used to reduce the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure.

5. Bypass

   A bypass is the known diversion of stormwater from any portion of a stormwater control facility including the collection system, which is not a designed or established operating mode for the facility.

6. Bulk Storage of Liquid Products

Liquid raw materials, manufactured products, waste materials or by-products with a single above ground storage container having a capacity of greater than 660 gallons or with multiple above ground storage containers located in close proximity to each other having a total combined storage capacity of greater than 1,320 gallons.

7. Clean Water Act

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

8. Division or DWQ

The Division of Water Quality, Department of Environment and Natural Resources.

9. Director

The Director of the Division of Water Quality, the permit issuing authority.

10. EMC

The North Carolina Environmental Management Commission.

11. Grab Sample

An individual sample collected instantaneously. Grab samples that will be directly analyzed or qualitatively monitored must be taken within the first 30 minutes of discharge.

12. Hazardous Substance

Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

13. Landfill

A disposal facility or part of a disposal facility where waste is placed in or on land and which is not a land treatment facility, a surface impoundment, an injection well, a hazardous waste long-term storage facility or a surface storage facility.

14. Municipal Separate Storm Sewer System

A stormwater collection system within an incorporated area of local self-government such as a city or town.

15. No Exposure

A condition of no exposure means that all industrial materials and activities are protected by a storm resistant shelter or acceptable storage containers to prevent exposure to rain, snow, snowmelt, or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. DWQ may grant a No Exposure Exclusion from NPDES Stormwater Permitting requirements only if a facility complies with the terms and conditions described in 40 CFR §122.26(g).

16. Overburden

Any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.

17. Permittee

The owner or operator issued a permit pursuant to this individual permit.

18. Point Source Discharge of Stormwater

Any discernible, confined and discrete conveyance including, but not specifically limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the state.

19. Representative Storm Event

A storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation. For example, if it rains for 2 hours without producing any collectable discharge, and then stops, a sample may be collected if a rain producing a discharge begins again within the next 10 hours.

20. Representative Outfall Status

When it is established that the discharge of stormwater runoff from a single outfall is representative of the discharges at multiple outfalls, the DWQ may grant representative outfall status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

21. Rinse Water Discharge

The discharge of rinse water from equipment cleaning areas associated with industrial activity. Rinse waters from vehicle and equipment cleaning areas are process wastewaters and do not include washwaters utilizing any type of detergent or cleaning agent.

22. Secondary Containment

Spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to allow for the 25-year, 24-hour storm event.

23. Section 313 Water Priority Chemical

A chemical or chemical category which:

a. Is listed in 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;

b. Is present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and

c. That meets at least one of the following criteria:

(1) Is listed in Appendix D of 40 CFR part 122 on Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table IV (certain toxic pollutants and hazardous substances);

(2) Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or

(3) Is a pollutant for which EPA has published acute or chronic water quality criteria.

24. Severe Property Damage

Means substantial physical damage to property, damage to the control facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

25. Significant Materials

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

26. Significant Spills

Includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (Ref: 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (Ref: 40 CFR 302.4).

27. Stormwater Runoff

The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

28. Stormwater Associated with Industrial Activity

The discharge from any point source which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial site. Facilities considered to be engaged in "industrial activities" include those activities defined in 40 CFR 122.26(b)(14). The term does not include discharges from facilities or activities excluded from the NPDES program.

29. Stormwater Pollution Prevention Plan

A comprehensive site-specific plan which details measures and practices to reduce stormwater pollution and is based on an evaluation of the pollution potential of the site.

30. Ten Year Design Storm

The maximum 24 hour precipitation event expected to be equaled or exceeded on the average once in ten years. Design storm information can be found in the State of North Carolina Erosion and Sediment Control Planning and Design Manual.

31. Total Flow

The flow corresponding to the time period over which the entire storm event occurs. Total flow shall be either; (a) measured continuously, (b) calculated based on the amount of area draining to the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20 minute intervals during the rainfall event.

32. Total Maximum Daily Load (TMDL)

A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is a detailed water quality assessment that provides the scientific foundation for an implementation plan. The implementation plan outlines the steps necessary to reduce pollutant loads in a certain body of water to restore and maintain water quality standards in all seasons. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

33. Toxic Pollutant

Any pollutant listed as toxic under Section 307(a)(l) of the Clean Water Act.

34. Upset

Means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment or control facilities, inadequate treatment or control facilities, lack of preventive maintenance, or careless or improper operation.

35. Vehicle Maintenance Activity

Vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations.

36. Visible Sedimentation

Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin which can be seen with the unaided eye.

37. 25-year, 24 hour storm event

The maximum 24-hour precipitation event expected to be equaled or exceeded, on the average, once in 25 years.

PART II
STANDARD CONDITIONS FOR NPDES PERMITS

Section A. Definitions

2/Month
Samples are collected twice per month with at least ten calendar days between sampling events. These samples shall be representative of the wastewater discharged during the sample period.

3/Week
Samples are collected three times per week on three separate calendar days. These samples shall be representative of the wastewater discharged during the sample period.

Act or "the Act"
The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

Annual Average
The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar year. In the case of fecal coliform, the geometric mean of such discharges.

Arithmetic Mean
The summation of the individual values divided by the number of individual values.

Bypass
The known diversion of waste streams from any portion of a treatment facility including the collection system, which is not a designed or established or operating mode for the facility.

Calendar Day
The period from midnight of one day until midnight of the next day. However, for purposes of this permit, any consecutive 24-hour period that reasonably represents the calendar day may be used for sampling.

Calendar Week
The period from Sunday through the following Saturday.

Calendar Quarter
One of the following distinct periods: January through March, April through June, July through September, and October through December.

Composite Sample
A sample collected over a 24-hour period by continuous sampling or combining grab samples of at least 100 ml in such a manner as to result in a total sample representative of the wastewater discharge during the sample period. The Director may designate the most appropriate method (specific number and size of aliquots necessary, the time interval between grab samples, etc.) on a case-by-case basis. Samples may be collected manually or automatically. Composite samples may be obtained by the following methods:

(1) Continuous: a single, continuous sample collected over a 24-hour period proportional to the rate of flow.
(2) Constant time/variable volume: a series of grab samples collected at equal time intervals over a 24 hour period of discharge and combined proportional to the rate of flow measured at the time of individual sample collection, or
(3) Variable time/constant volume: a series of grab samples of equal volume collected over a 24 hour period with the time intervals between samples determined by a preset number of gallons passing the sampling point. Flow measurement between sample intervals shall be determined by use of a flow recorder and

totalizer, and the preset gallon interval between sample collection fixed at no greater than 1/24 of the expected total daily flow at the treatment system, or

(4) Constant time/constant volume: a series of grab samples of equal volume collected over a 24-hour period at a constant time interval. **Use of this method requires prior approval by the Director. This method may only be used in situations where effluent flow rates vary less than 15 percent.** The following restrictions also apply.
   - Influent and effluent grab samples shall be of equal size and of no less than 100 milliliters
   - Influent samples shall not be collected more than once per hour.
   - Permittees with wastewater treatment systems whose detention time ≤ 24 hours shall collect effluent grab samples at intervals of no greater than 20 minutes apart during any 24-hour period.
   - Permittees with wastewater treatment systems whose detention time exceeds 24 hours shall collect effluent grab samples at least every six hours; there must be a minimum of four samples during a 24-hour sampling period.

Continuous flow measurement
Flow monitoring that occurs without interruption throughout the operating hours of the facility. Flow shall be monitored continually except for the infrequent times when there may be no flow or for infrequent maintenance activities on the flow device.

Daily Discharge
The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. The "daily discharge" concentration comprises the mean concentration for a 24-hour sampling period as either a composite sample concentration or the arithmetic mean of all grab samples collected during that period. (40 CFR 122.2)

Daily Maximum
The highest "daily discharge" during the calendar month.

Daily Sampling
Parameters requiring daily sampling shall be sampled 5 out of every 7 days per week unless otherwise specified in the permit. Sampling shall be conducted on weekdays except where holidays or other disruptions of normal operations prevent weekday sampling. If sampling is required for all seven days of the week for any permit parameter(s), that requirement will be so noted on the Effluent Limitations and Monitoring Page(s).

DWQ or "the Division"
The Division of Water Quality, Department of Environment and Natural Resources.

EMC
The North Carolina Environmental Management Commission.

EPA
The United States Environmental Protection Agency

Facility Closure
Cessation of all activities that require coverage under this NPDES permit. Completion of facility closure will allow this permit to be rescinded.

Geometric Mean
The Nth root of the product of the individual values where N = the number of individual values. For purposes of calculating the geometric mean, values of "0" (or "< [detection level]") shall be considered = 1.

Grab Sample
Individual samples of at least 100 ml collected over a period of time not exceeding 15 minutes. Grab samples can be collected manually. Grab samples must be representative of the discharge (or the receiving stream, for instream samples).

Hazardous Substance
Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

Instantaneous flow measurement
A measure of flow taken at the time of sampling, when both the sample and flow will be representative of the total discharge.

Monthly Average (concentration limit)
The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar month. In the case of fecal coliform, the geometric mean of such discharges.

Permit Issuing Authority
The Director of the Division of Water Quality.

Quarterly Average (concentration limit)
The average of all samples taken over a calendar quarter.

Severe property damage
Substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage excludes economic loss caused by delays in production.

Toxic Pollutant:
Any pollutant listed as toxic under Section 307(a)(1) of the CWA.

Upset
An incident beyond the reasonable control of the Permittee causing unintentional and temporary noncompliance with permit effluent limitations and/or monitoring requirements. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Weekly Average (concentration limit)
The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar week. In the case of fecal coliform, the geometric mean of such discharges.

Section B. General Conditions

1. Duty to Comply
   The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR 122.41].

   a. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

b. The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402 (a) (3) or 402 (b) (8) of the Act, is subject to a civil penalty not to exceed $37,500 per day for each violation. [33 USC 1319 (d) and 40 CFR 122.41 (a) (2)]

c. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. [33 USC 1319 (c) (1) and 40 CFR 122.41 (a) (2)]

d. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. [33 USC 1319 (c) (2) and 40 CFR 122.41 (a) (2)]

e. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions. [40 CFR 122.41 (a) (2)]

f. Under state law, a civil penalty of not more than $25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [North Carolina General Statutes § 143-215.6A]

g. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500. Penalties for Class II violations are not to exceed $16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500. [33 USC 1219 (g) (2) and 40 CFR 122.41 (a) (3)]

2. Duty to Mitigate
The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit with a reasonable likelihood of adversely affecting human health or the environment [40 CFR 122.41 (d)].

3. Civil and Criminal Liability
Except as provided in permit conditions on "Bypassing" (Part II. C. 4), "Upsets" (Part II. C. 5) and "Power Failures" (Part II. C. 7), nothing in this permit shall be construed to relieve the Permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6 or Section 309

of the Federal Act, 33 USC 1319. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

4. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USG 1321. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

5. Property Rights
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations [40 CFR 122.41 (g)].

6. Onshore or Offshore Construction
This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

7. Severability
The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby [NCGS 150B-23].

8. Duty to Provide Information
The Permittee shall furnish to the Permit Issuing Authority, within a reasonable time, any information which the Permit Issuing Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Permit Issuing Authority upon request, copies of records required by this permit [40 CFR 122.41 (h)].

9. Duty to Reapply
If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit [40 CFR 122.41 (b)].

10. Expiration of Permit
The Permittee is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the Permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date. Any Permittee that has not requested renewal at least 180 days prior to expiration, or any Permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will subject the Permittee to enforcement procedures as provided in NCGS 143-215.6 and 33 USC 1251 et. seq.

11. Signatory Requirements
All applications, reports, or information submitted to the Permit Issuing Authority shall be signed and certified [40 CFR 122.41 (k)].

a. **All permit applications shall be signed as follows:**
(1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long

term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures .

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].

b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   1. The authorization is made in writing by a person described above;
   2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
   3. The written authorization is submitted to the Permit Issuing Authority [40 CFR 122.22]

c. Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22]

d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:
"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

12. Permit Actions
This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition [40 CFR 122.41 (f)].

13. Permit Modification, Revocation and Reissuance, or Termination
The issuance of this permit does not prohibit the permit issuing authority from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 2H.0100; and North Carolina General Statute 143-215.1 et. al.

14. Annual Administering and Compliance Monitoring Fee Requirements
The Permittee must pay the annual administering and compliance monitoring fee within thirty days after being billed by the Division. Failure to pay the fee in a timely manner in accordance with 15A NCAC 2H.0105 (b) (2) may cause this Division to initiate action to revoke the permit.

Section C. Operation and Maintenance of Pollution Controls

1. Certified Operator

Upon classification of the permitted facility by the Certification Commission, the Permittee shall employ a certified water pollution control treatment system operator in responsible charge (ORC) of the water pollution control treatment system. Such operator must hold a certification of the grade equivalent to or greater than the classification assigned to the water pollution control treatment system by the Certification Commission. The Permittee must also employ one or more certified Back-up ORCs who possess a currently valid certificate of the type of the system. Back-up ORCs must possess a grade equal to (or no more than one grade less than) the grade of the system [15A NCAC 8G.0201].

The ORC of each Class I facility must:

- Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least weekly
- Comply with all other conditions of 15A NCAC 8G.0204.

The ORC of each Class II, III and IV facility must:

- Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least five days per week, excluding holidays
- Properly manage and document daily operation and maintenance of the facility
- Comply with all other conditions of 15A NCAC 8G.0204.

Once the facility is classified, the Permittee shall submit a letter to the Certification Commission designating the operator in responsible charge:

a. Within 60 calendar days prior to wastewater being introduced into a new system
b. Within 120 calendar days of:
    - Receiving notification of a change in the classification of the system requiring the designation of a new ORC and back-up ORC
    - A vacancy in the position of ORC or back-up ORC.

2. Proper Operation and Maintenance

The Permittee shall at all times provide the operation and maintenance resources necessary to operate the existing facilities at optimum efficiency. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the Permittee to install and operate backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit [40 CFR 122.41 (e)].

NOTE: Properly and officially designated operators are fully responsible for all proper operation and maintenance of the facility, and all documentation required thereof, whether acting as a contract operator [subcontractor] or a member of the Permittee's staff.

3. Need to Halt or Reduce not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this permit [40 CFR 122.41 (c)].

4. Bypassing of Treatment Facilities

a. Bypass not exceeding limitations [40 CFR 122.41 (m) (2)]

The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs b. and c. of this section.

b. Notice [40 CFR 122.41 (m) (3)]
   (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass.
   (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Part II. E. 6. (24-hour notice).

c. Prohibition of Bypass
   (1) Bypass from the treatment facility is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for bypass, unless:
      (A) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
      (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      (C) The Permittee submitted notices as required under Paragraph b. of this section.

   (2) Bypass from the collection system is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for a bypass as provided in any current or future system-wide collection system permit associated with the treatment facility.

   (3) The Permit Issuing Authority may approve an anticipated bypass, after considering its adverse effects, if the Permit Issuing Authority determines that it will meet the three conditions listed above in Paragraph c. (1) of this section.

5. Upsets
   a. Effect of an upset [40 CFR 122.41 (n) (2)]: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph b. of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   b. Conditions necessary for a demonstration of upset: Any Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
      (2) The Permittee facility was at the time being properly operated; and
      (3) The Permittee submitted notice of the upset as required in Part II. E. 6. (b) of this permit.
      (4) The Permittee complied with any remedial measures required under Part II. B. 2. of this permit.

   c. Burden of proof [40 CFR 122.41 (n) (4)]: The Permittee seeking to establish the occurrence of an upset has the burden of proof in any enforcement proceeding.

6. Removed Substances
   Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of in accordance with NCGS 143-215.1 and in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States. The Permittee shall comply with all existing Federal regulations governing the disposal of sewage sludge. Upon promulgation of 40 CFR Part 503, any permit issued by the Permit Issuing Authority for the utilization/disposal of sludge may be

reopened and modified, or revoked and reissued, to incorporate applicable requirements at 40 CFR 503. The Permittee shall comply with applicable 40 CFR 503 Standards for the Use and Disposal of Sewage Sludge (when promulgated) within the time provided in the regulation, even if the permit is not modified to incorporate the requirement. The Permittee shall notify the Permit Issuing Authority of any significant change in its sludge use or disposal practices.

7. Power Failures
The Permittee is responsible for maintaining adequate safeguards (as required by 15A NCAC 2H.0124) to prevent the discharge of untreated or inadequately treated wastes during electrical power failures either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

Section D. Monitoring and Records

1. Representative Sampling
Samples collected and measurements taken, as required herein, shall be characteristic of the volume and nature of the permitted discharge. Samples collected at a frequency less than daily shall be taken on a day and time that is characteristic of the discharge over the entire period the sample represents. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Permit Issuing Authority [40 CFR 122.41 (j)].

2. Reporting
Monitoring results obtained during the previous month(s) shall be summarized for each month and reported on a monthly Discharge Monitoring Report (DMR) Form (MR 1, 1.1, 2, 3) or alternative forms approved by the Director, postmarked no later than the last calendar day of the month following the completed reporting period.

The first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the following address:

NC DENR / Division of Water Quality / Water Quality Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

3. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from the true discharge rates throughout the range of expected discharge volumes. Flow measurement devices shall be accurately calibrated at a minimum of once per year and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Director shall approve the flow measurement device and monitoring location prior to installation.

Once-through condenser cooling water flow monitored by pump logs, or pump hour meters as specified in Part I of this permit and based on the manufacturer's pump curves shall not be subject to this requirement.

4. Test Procedures
Laboratories used for sample analysis must be certified by the Division. Permittees should contact the Division's Laboratory Certification Section (919 733-3908 or http://h2o.enr.state.nc.us/lab/cert.htm) for information regarding laboratory certifications.

Personnel conducting testing of field-certified parameters must hold the appropriate field parameter certifications.

Test procedures for the analysis of pollutants shall conform to the EMC regulations (published pursuant to NCGS 143-215.63 et. seq.), the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the CWA (as amended), and 40 CFR 136; or in the case of sludge use or disposal, approved under 40 CFR 136, unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this permit [40 CFR 122.41].

To meet the intent of the monitoring required by this permit, all test procedures must produce minimum detection and reporting levels that are below the permit discharge requirements and all data generated must be reported down to the minimum detection or lower reporting level of the procedure. If no approved methods are determined capable of achieving minimum detection and reporting levels below permit discharge requirements, then the most sensitive (method with the lowest possible detection and reporting level) approved method must be used.

5. Penalties for Tampering
The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR 122.41].

6. Records Retention
Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the Permittee shall retain records of all monitoring information, including:
   - all calibration and maintenance records
   - all original strip chart recordings for continuous monitoring instrumentation
   - copies of all reports required by this permit
   - copies of all data used to complete the application for this permit

These records or copies shall be maintained for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time [40 CFR 122.41].

7. Recording Results
For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information [40 CFR 122.41]:

   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

8. Inspection and Entry
The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to;

   a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location [40 CFR 122.41 (i)].

Section E Reporting Requirements

1. Change in Discharge
All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

2. Planned Changes
The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility [40 CFR 122.41 (l)]. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29 (b); or
b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42 (a) (l).
c. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

3. Anticipated Noncompliance
The Permittee shall give advance notice to the Director of any planned changes to the permitted facility or other activities that might result in noncompliance with the permit [40 CFR 122.41 (l) (2)].

4. Transfers
This permit is not transferable to any person without approval from the Director. The Director may require modification or revocation and reissuance of the permit to document the change of ownership. Any such action may incorporate other requirements as may be necessary under the CWA [40 CFR 122.41 (l) (3)].

5. Monitoring Reports
Monitoring results shall be reported at the intervals specified elsewhere in this permit [40 CFR 122.41 (l) (4)].

a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) (See Part II. D. 2) or forms provided by the Director for reporting results of monitoring of sludge use or disposal practices.
b. If the Permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted on the DMR.

6. Twenty-four Hour Reporting
a. The Permittee shall report to the Director or the appropriate Regional Office any noncompliance that potentially threatens public health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance, and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR 122.41 (l) (6)].

b. The Director may waive the written report on a case-by-case basis for reports under this section if the oral report has been received within 24 hours.

c. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

7. Other Noncompliance
The Permittee shall report all instances of noncompliance not reported under Part II. E. 5 and 6. of this permit at the time monitoring reports are submitted. The reports shall contain the information listed in Part II. E. 6. of this permit [40 CFR 122.41 (l) (7)].

8. Other Information
Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information [40 CFR 122.41 (l) (8)].

9. Noncompliance Notification
The Permittee shall report by telephone to either the central office or the appropriate regional office of the Division as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

a. Any occurrence at the water pollution control facility which results in the discharge of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass without treatment of all or any portion of the influent to such station or facility.

Persons reporting such occurrences by telephone shall also file a written report within 5 days following first knowledge of the occurrence.

10. Availability of Reports
Except for data determined to be confidential under NCGS 143-215.3 (a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the Division. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.1 (b)(2) or in Section 309 of the Federal Act.

11. Penalties for Falsification of Reports
The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than two years per violation, or by both [40 CFR 122.41].

12. Annual Performance Reports
Permittees who own or operate facilities that collect or treat municipal or domestic waste shall provide an annual report to the Permit Issuing Authority and to the users/customers served by the Permittee (NCGS 143-215.1C). The report shall summarize the performance of the collection or treatment system, as well as the extent to which the facility was compliant with applicable Federal or State laws, regulations and rules pertaining to water quality.

The report shall be provided no later than sixty days after the end of the calendar or fiscal year, depending upon which annual period is used for evaluation.
The report shall be sent to:

NC DENR / DWQ / Central Files
1617 Mail Service Center
Raleigh, NC 27699-1617

PART III
OTHER REQUIREMENTS

Section A. Construction
The Permittee shall not commence construction of wastewater treatment facilities, nor add to the plant's treatment capacity, nor change the treatment process(es) utilized at the treatment plant unless the Division has issued an Authorization to Construct (AtC) permit. Issuance of an AtC will not occur until Final Plans and Specifications for the proposed construction have been submitted by the Permittee and approved by the Division.

Section B. Groundwater Monitoring
The Permittee shall, upon written notice from the Director, conduct groundwater monitoring as may be required to determine the compliance of this NPDES permitted facility with the current groundwater standards.

Section C. Changes in Discharges of Toxic Substances
The Permittee shall notify the Permit Issuing Authority as soon as it knows or has reason to believe (40 CFR 122.42):

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
   (1) One hundred micrograms per liter (100 µg/L);
   (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2.4-dinitrophenol and for 2-methyl-4.6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
   (3) Five times the maximum concentration value reported for that pollutant in the permit application.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
   (1) Five hundred micrograms per liter (500 µg/L);
   (2) One milligram per liter (1 mg/L) for antimony;
   (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

Section D. Evaluation of Wastewater Discharge Alternatives
The Permittee shall evaluate all wastewater disposal alternatives and pursue the most environmentally sound alternative of the reasonably cost effective alternatives. If the facility is in substantial non-compliance with the terms and conditions of the NPDES permit or governing rules, regulations or laws, the Permittee shall submit a report in such form and detail as required by the Division evaluating these alternatives and a plan of action within 60 days of notification by the Division.

Section E. Facility Closure Requirements
The Permittee must notify the Division at least 90 days prior to the closure of any wastewater treatment system covered by this permit. The Division may require specific measures during deactivation of the system to prevent adverse impacts to waters of the State. This permit cannot be rescinded while any activities requiring this permit continue at the permitted facility.

PART IV
SPECIAL CONDITIONS FOR MUNICIPAL FACILITIES

Section A. Definitions

In addition to the definitions in Part II of this permit, the following definitions apply to municipal facilities:

Indirect Discharge or Industrial User

Any non-domestic source that discharges wastewater containing pollutants into a POTW regulated under section 307(b), (c) or (d) of the CWA. [40 CFR 403.3 (b) (i) and (j)]

Interference

Inhibition or disruption of the POTW treatment processes; operations; or its sludge process, use, or disposal which causes or contributes to a violation of any requirement of the POTW's NPDES Permit or prevents sewage sludge use or disposal in compliance with specified applicable State and Federal statutes, regulations, or permits. [15A NCAC 2H.0903 (b) (13)]

Pass Through

A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or with discharges from other sources, causes a violation, including an increase in the magnitude or duration of a violation, of the POTW's NPDES permit, or of an instream water quality standard. [15A NCAC 2H.0903 (b) (23)]

Publicly Owned Treatment Works (POTW)

A treatment works as defined by Section 212 of the CWA, owned by a State or local government entity. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the local government entity, or municipality, as defined in section 502(4) of the CWA, which has jurisdiction over indirect discharges to and the discharges from such a treatment works. [15A NCAC 2H.0903 (b) (27)]

"Significant Industrial User" or "SIU"

An industrial user that discharges wastewater into a publicly owned treatment works and that [15A NCAC 2H.0903 (b) (34)]:

(a) discharges an average of 25,000 gallons or more per day of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewaters) or;
(b) contributes more than 5 percent of the design flow of the POTW treatment plant or more than 5 percent of the maximum allowable headworks loading of the POTW treatment plant for any pollutant of concern, or;
(c) is required to meet a national categorical pretreatment standard, or;
(d) is, regardless of Parts (a), (b), and (c) of this definition, otherwise determined by the POTW, the Division, or the EPA to have a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement or POTW's receiving stream standard, or to limit the POTW's sludge disposal options.

Section B. Publicly Owned Treatment Works (POTWs)

All POTWs are required to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, including interference with its use or disposal of municipal sludge, or pass through the treatment works or otherwise be incompatible with such treatment works. [40 CFR 403.2]

All POTWs must provide adequate notice to the Director of the following [40 CFR 122.42 (b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger, including pump and hauled waste, which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced by an indirect discharger as influent to that POTW at the time of issuance of the permit.
3. For purposes of this paragraph, adequate notice shall include information on (1) the quality and quantity of effluent introduced into the POTW, and (2) any anticipated impact that may result from the change of the quantity or quality of effluent to be discharged from the POTW.

Section C. Municipal Control of Pollutants from Industrial Users.

1. Effluent limitations are listed in Part I of this permit. Other pollutants attributable to inputs from industries using the municipal system may be present in the Permittee's discharge. At such time as sufficient information becomes available to establish limitations for such pollutants, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.

2. Prohibited Discharges

   a. Under no circumstances shall the Permittee allow introduction of pollutants or discharges into the waste treatment system or waste collection system which cause or contribute to Pass Through or Interference as defined in 15A NCAC 2H.0900 and 40 CFR 403. [40 CFR 403.5 (a) (1)]

   b. Under no circumstances shall the Permittee allow introduction of the following wastes in the waste treatment or waste collection system [40 CFR 403.5 (b)]:
      1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
      2. Pollutants which cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges;
      3. Solid or viscous pollutants in amounts which cause obstruction to the flow in the POTW resulting in Interference;
      4. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
      5. Heat in amounts which will may inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Division, upon request of the POTW, approves alternate temperature limits;
      6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
      7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
      8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

   c. The Permittee shall investigate the source of all discharges into the WWTP, including slug loads and other unusual discharges, which have the potential to adversely impact the permittee's Pretreatment Program and/or the operation of the WWTP.

      The Permittee shall report such discharges into the WWTP to the Director or the appropriate Regional Office. Any information shall be provided orally within 24 hours from the time the Permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the discharge, the investigation into possible sources; the period of the discharge, including exact dates

and times; and if the discharge has not ceased, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance,

3. With regard to the effluent requirements listed in Part I of this permit, it may be necessary for the Permittee to supplement the requirements of the Federal Pretreatment Standards (40 CFR, Part 403) to ensure compliance by the Permittee with all applicable effluent limitations. Such actions by the Permittee may be necessary regarding some or all of the industries discharging to the municipal system.

4. The Permittee shall require any industrial discharger sending its effluent to the permitted system to meet Federal Pretreatment Standards promulgated in response to Section 307(b) of the Act as amended (which includes categorical standards and locally derived limits and narrative requirements). Prior to accepting wastewater from any significant industrial user, the Permittee shall either develop and submit to the Division a new Pretreatment Program or a modification of an existing Pretreatment Program, for approval as required under section D below as well as 15A NCAC 2H.0907 (a) and (b). [40 CFR 122.44 (j) (2)]

5. This permit shall be modified, or alternatively, revoked and reissued, to incorporate or modify an approved POTW Pretreatment Program or to include a compliance schedule for the development of a POTW Pretreatment Program as required under Section 402 (b) (8) of the CWA and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.

Section D. Pretreatment Programs

Under authority of sections 307 (b) and (c) and 402 (b) (8) of the CWA and implementing regulations 40 CFR 403, North Carolina General Statute 143-215.3 (14) and implementing regulations 15A NCAC 2H.0900, and in accordance with the approved pretreatment program, all provisions and regulations contained and referenced in the Pretreatment Program Submittal are an enforceable part of this permit. [40 CFR 122.44 (j) (2)]

The Permittee shall operate its approved pretreatment program in accordance with Section 402 (b) (8) of the CWA, 40 CFR 403, 15A NCAC 2H.0900, and the legal authorities, policies, procedures, and financial provisions contained in its pretreatment program submission and Division approved modifications thereof. Such operation shall include but is not limited to the implementation of the following conditions and requirements. Terms not defined in Part II or Part IV of this permit are as defined in 15A NCAC 2H.0903 and 40 CFR 403.3.

1. Sewer Use Ordinance (SUO)
   The Permittee shall maintain adequate legal authority to implement its approved pretreatment program. [15A NCAC 2H.0905 and .0906; 40 CFR 403.8 (f) (1) and 403.9 (1), (2)]

2. Industrial Waste Survey (IWS)
   The permittee shall implement an IWS consisting of: the survey of users of the POTW, as required by 40 CFR 403.8 (f) (2) (i-iii) and 15A NCAC 2H.0905 [also 40 CFR 122.44 (j) (1)], including identification of all industrial users and the character and amount of pollutants contributed to the POTW by these industrial users and identification of those industrial users meeting the definition of SIU. The Permittee shall submit a summary of its IWS activities to the Division at least once every five years, and as required by the Division. The IWS submission shall include a summary of any investigations conducted under paragraph B, 2, c, of this Part.

3. Monitoring Plan
   The Permittee shall implement a Division-approved Monitoring Plan for the collection of facility specific data to be used in a wastewater treatment plant Headworks Analysis (HWA) for the development of specific pretreatment local limits. Effluent data from the Plan shall be reported on the DMRs (as required by Part II, Section D, and Section E.5.). [15A NCAC 2H.0906 (b) (2) and .0905]

4. Headworks Analysis (HWA) and Local Limits
   The Permittee shall obtain Division approval of a HWA at least once every five years, and as required by the Division. Within 180 days of the effective date of this permit (or any subsequent permit modification) the Permittee shall submit to the Division a written technical evaluation of the need to revise local limits (i.e., an

updated HWA or documentation of why one is not needed) [40 CFR 122.44]. The Permittee shall develop, in accordance with 40 CFR 403.5 (c) and 15A NCAC 2H.0909, specific Local Limits to implement the prohibitions listed in 40 CFR 403.5 (a) and (b) and 15A NCAC 2H.0909.

5. Industrial User Pretreatment Permits (IUP) & Allocation Tables
In accordance with NCGS 143-215.1, the Permittee shall issue to all significant industrial users, permits for operation of pretreatment equipment and discharge to the Permittee's treatment works. These permits shall contain limitations, sampling protocols, reporting requirements, appropriate standard and special conditions, and compliance schedules as necessary for the installation of treatment and control technologies to assure that their wastewater discharge will meet all applicable pretreatment standards and requirements. The Permittee shall maintain a current Allocation Table (AT) which summarizes the results of the HWA and the limits from all IUPs. Permitted IUP loadings for each parameter cannot exceed the treatment capacity of the POTW as determined by the HWA. [15A NCAC 2H.0909, .0916, and .0917; 40 CFR 403.5, 403.8 (f) (1) (iii); NCGS 143-215.67 (a)]

6. Authorization to Construct (AtC)
The Permittee shall ensure that an Authorization to Construct permit (AtC) is issued to all applicable industrial users for the construction or modification of any pretreatment facility. Prior to the issuance of an AtC, the proposed pretreatment facility and treatment process must be evaluated for its capacity to comply with all Industrial User Pretreatment Permit (IUP) limitations. [15A NCAC 2H.0906 (b) (6) and .0905; NCGS 143-215.1 (a) (8)]

7. POTW Inspection & Monitoring of their SIUs
The Permittee shall conduct inspection, surveillance, and monitoring activities as described in its Division approved pretreatment program in order to determine, independent of information supplied by industrial users, compliance with applicable pretreatment standards. [15A NCAC 2H.0908 (d); 40 CFR 403.8 (f) (2) (v)] The Permittee must:
   a. Inspect all SIUs at least once per calendar year; and
   b. Sample all SIUs at least twice per calendar year for all permit-limited pollutants, once during the period from January 1 through June 30 and once during the period from July 1 through December 31, except for organic compounds which shall be sampled once per calendar year. For the purposes of this paragraph, "organic compounds" means the types of compounds listed in 40 CFR 136.3 (a), Tables IC, ID, and IF, as amended.

8. SIU Self Monitoring and Reporting
The Permittee shall require all industrial users to comply with the applicable monitoring and reporting requirements outlined in the Division-approved pretreatment program, the industry's pretreatment permit, or in 15A NCAC 2H.0908. [15A NCAC 2H.0906 (b) (4) and .0905; 40 CFR 403.8 (f) (1) (v) and (2) (iii); 40 CFR 122.44 (j) (2)]

9. Enforcement Response Plan (ERP)
The Permittee shall enforce and obtain appropriate remedies for violations of all pretreatment standards promulgated pursuant to section 307 (b) and (c) of the CWA (40 CFR 405 et. seq.), prohibitive discharge standards as set forth in 40 CFR 403.5 and 15A NCAC 2H.0909, and specific local limitations. All enforcement actions shall be consistent with the Enforcement Response Plan (ERP) approved by the Division. [15A NCAC 2H.0906 (b) (7) and .0905; 40 CFR 403.8 (f) (5)]

10. Pretreatment Annual Reports (PAR)
The Permittee shall report to the Division in accordance with 15A NCAC 2H.0908. In lieu of submitting annual reports, Modified Pretreatment Programs developed under 15A NCAC 2H.0904 (b) may be required to submit a partial annual report or to meet with Division personnel periodically to discuss enforcement of pretreatment requirements and other pretreatment implementation issues.

For all other active pretreatment programs, the Permittee shall submit two copies of a Pretreatment Annual Report (PAR) describing its pretreatment activities over the previous twelve months to the Division at the following address:

NC DENR / DWQ / Pretreatment, Emergency Response, and Collection Systems Unit (PERCS)
1617 Mail Service Center
Raleigh, NC 27699-1617

These reports shall be submitted according to a schedule established by the Director and shall contain the following:

a.) Narrative
A brief discussion of reasons for, status of, and actions taken for all SIUs in Significant Non-Compliance (SNC);

b.) Pretreatment Program Summary (PPS)
A pretreatment program summary (PPS) on specific forms approved by the Division;

c.) Significant Non-Compliance Report (SNCR)
The nature of the violations and the actions taken or proposed to correct the violations on specific forms approved by the Division;

d.) Industrial Data Summary Forms (IDSF)
Monitoring data from samples collected by both the POTW and the SIU. These analytical results must be reported on Industrial Data Summary Forms (IDSF) or other specific format approved by the Division;

e.) Other Information
Copies of the POTW's allocation table, new or modified enforcement compliance schedules, public notice of SIUs in SNC, and any other information, upon request, which in the opinion of the Director is needed to determine compliance with the pretreatment implementation requirements of this permit;

11. Public Notice
The Permittee shall publish annually a list of SIUs that were in SNC as defined in the Permittee's Division-approved Sewer Use Ordinance with applicable pretreatment requirements and standards during the previous twelve month period. This list shall be published within four months of the applicable twelve month period. [15A NCAC 2H.0903 (b) (35), .0908 (b) (5) and .0905 and 40 CFR 403.8 (f) (2) (vii)]

12. Record Keeping
The Permittee shall retain for a minimum of three years records of monitoring activities and results, along with support information including general records, water quality records, and records of industrial impact on the POTW. [15A NCAC 2H.0908 (f); 40 CFR 403.12 (o)]

13. Funding and Financial Report
The Permittee shall maintain adequate funding and staffing levels to accomplish the objectives of its approved pretreatment program. [15A NCAC 2H.0906 (a) and .0905; 40 CFR 403.8 (f) (3), 403.9 (b) (3)]

14. Modification to Pretreatment Programs
Modifications to the approved pretreatment program including but not limited to local limits modifications, POTW monitoring of their SIUs, and Monitoring Plan modifications, shall be considered a permit modification and shall be governed by 15 NCAC 2H.0114 and 15A NCAC 2H.0907.

Attachment 3

Complaint and Motion for Injunctive Relief
August 16, 2013

STATE OF NORTH CAROLINA COUNTY OF WAKE	IN THE GENERAL COURT OF JUSTICE SUPERIOR COURT DIVISION 13 CVS _____
STATE OF NORTH CAROLINA *ex rel.* NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, Plaintiff, v. DUKE ENERGY PROGRESS, INC., Defendant.	**COMPLAINT AND MOTION FOR INJUNCTIVE RELIEF RULE 65 N.C.R.C.P.**

The Plaintiff State of North Carolina in accordance with Article 21 of Chapter 143 of the North Carolina General Statutes, and N.C. Gen. Stat. § 1A-1, Rule 65, complaining of the Defendant alleges and says:

PARTIES

1. Plaintiff is the sovereign State of North Carolina. This action is being brought upon the relation of the North Carolina Department of Environment and Natural Resources ("DENR") and its Division of Water Resources ("DWR" or "division"),[1] an agency of the State established pursuant to the provisions of N.C. Gen. Stat. § 143B-279.1 *et seq.*, and vested with the statutory authority regarding protection of the environment and enforcement of environmental laws pursuant to N.C. Gen. Stat. § 143-211 *et seq.*

2. Defendant, Duke Energy Progress, Inc. (formerly Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., prior to April 29, 2013), is a corporation

[1] DENR's Division of Water Quality and Division of Water Resources have been combined and are currently operating under the name of Division of Water Resources. All actions taken by the DWQ are considered to have been taken by the DWR.

organized and existing under the laws of the State of North Carolina. Defendant's principal place of business is in Wake County, North Carolina and is located at 410 South Wilmington Street, PEB 17B5, Raleigh, North Carolina 27601. Defendant's Registered Agent is CT Corporation System, 150 Fayetteville Street, Box 1011, Raleigh, North Carolina 27601

3. Defendant owns the following six (6) Facilities ("6 Facilities"):

(1) ***Mayo Steam Electric Generating Plant*** ("Mayo Steam Electric Plant") in Person County;

(2) ***Roxboro Steam Electric Generating Plant*** ("Roxboro Steam Electric Plant") in Person County;

(3) ***Cape Fear Steam Electric Generating Plant*** ("Cape Fear Steam Electric Plant") in Chatham County;

(4) ***H.F. Lee Steam Electric Plant*** ("Lee Steam Electric Plant") in Wayne County;

(5) ***Weatherspoon Steam Electric Plant*** in Robeson County; and

(6) ***L. V. Sutton Electric Plant*** ("Sutton Electric Plant") in New Hanover County.

4. Defendant or its predecessor was doing business in all of the counties set forth in paragraph 3 above, at each of the 6 Facilities, at the time the violations or threatened violations were committed that gave rise to this action.

JURISDICTION AND VENUE

5. The Superior Court has jurisdiction of this action for injunctive relief for existing or threatened violations of various laws and rules and regulations governing the protection of the State's water resources pursuant to N.C. Gen. Stat. §§ 7A-245 and 143-215.6C, and for such other relief as the Court shall deem proper.

6. Wake County is a proper venue for this action because Defendant's principal place of business is located in Wake County.

GENERAL ALLEGATIONS

Applicable Laws and Regulations

7. Pursuant to N.C. Gen. Stat. § 143-215.3(a)(1), the Environmental Management Commission ("EMC" or the "Commission") has the power "[t]o make rules implementing Articles 21, 21A, 21B or 38 of . . . Chapter" 143 of the North Carolina General Statutes. These statutes, and the rules adopted under them, are designed to further the public policy of the State, as declared in N.C. Gen. Stat. § 143-211, "to provide for the conservation of its water and air resources . . . [and], within the context of this Article [21] and Articles 21A and 21B of this Chapter [143], to achieve and to maintain for the citizens of the State a total environment of superior quality."

8. N.C. Gen. Stat. § 143-211 further provides that "[s]tandards of water and air purity shall be designed to protect human health, to prevent injury to plant and animal life, to prevent damage to public and private property, to insure the continued enjoyment of the natural attractions of the State, to encourage the expansion of employment opportunities, to provide a permanent foundation for healthy industrial development and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources."

9. The Commission has the power to issue permits with conditions attached which the Commission believes are necessary to achieve the purposes of Article 21 of Chapter 143 of the General Statutes. N.C. Gen. Stat. § 143-215.1(b)(4).

10. Pursuant to its authority in N.C. Gen. Stat. § 143-215.3(a)(4) to delegate such of its powers as it deems necessary, the Commission has delegated the authority to issue permits,

and particularly discharge permits, to the Director of the Division of Water Resources ("Director"). *See* Title 15A of the North Carolina Administrative Code ("NCAC"), rule 2H.0112[2]. A copy of this rule is attached hereto as Plaintiff's Exhibit No. 1, and is incorporated herein by reference.

11. N.C. Gen. Stat. § 143-215.1 requires a permit before any person can "make any outlets into the waters of the State" or "cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with the waters of the State in violation of the water quality standards applicable to the assigned classifications ... unless allowed as a condition of any permit, special order or other appropriate instrument issued or entered into by the Commission under the provisions of this Article [Article 21 of Chapter 143 of the General Statutes]." N.C. Gen. Stat. §§ 143-215.1(a) (1) and (6).

12. The Commission's rules in 15A NCAC Subchapter 2L (hereinafter "2L Rules") "establish a series of classifications and water quality standards applicable to the groundwaters of the State." 15A NCAC 2L.0101(a). A copy of the 2L Rules is attached hereto as Plaintiff's Exhibit No. 2 and is incorporated herein by reference.

13. "Groundwaters" are defined in the 2L Rules as "those waters occurring in the subsurface under saturated conditions." 15A NCAC 2L.0102(11).

14. The 2L Rules "are applicable to all activities or actions, intentional or accidental, which contribute to the degradation of groundwater quality, regardless of any permit issued by a governmental agency authorizing such action or activity except an innocent landowner who is a bona fide purchaser of property which contains a source of groundwater contamination, who

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[2] 15A NCAC 2H.0112. This Rule actually delegates the authority to issue discharge permits to the Director of the former DWQ. However, this authority has now been delegated to the Director of the DWR.

purchased such property without knowledge or a reasonable basis for knowing that groundwater contamination had occurred, or a person whose interest or ownership in the property is based or derived from a security interest in the property, shall not be considered a responsible party." 15A NCAC 2L.0101(b).

15. The policy section of the 2L Rules provides that the 2L Rules "are intended to maintain and preserve the quality of the groundwaters, prevent and abate pollution and contamination of the waters of the state, protect public health, and permit management of the groundwaters for their best usage by the citizens of North Carolina." 15A NCAC 2L.0103(a).

16. "Contaminant" is defined in the 2L Rules as "any substance occurring in groundwater in concentrations which exceed the groundwater quality standards specified in Rule .0202 of the Subchapter." 15A NCAC 2L.0102(4).

17. "Natural Conditions" are defined in the 2L Rules as "the physical, biological, chemical and radiological conditions which occur naturally." 15A NCAC 2L.0102(16).

18. The policy section of the 2L Rules provides further that, "[i]t is the policy of the Commission that the best usage of the groundwaters of the state is as a source of drinking water. These groundwaters generally are a potable source of drinking water without the necessity of significant treatment. It is the intent of these Rules to protect the overall high quality of North Carolina's groundwaters to the level established by the standards and to enhance and restore the quality of degraded groundwaters where feasible and necessary to protect human health and the environment, or to ensure their suitability as a future source of drinking water." 15A NCAC 2L.0103(a).

19. The policy section of the 2L Rules provides further that, "[n]o person shall conduct or cause to be conducted, any activity which causes the concentration of any substance to exceed

that specified in Rule .0202 of this Subchapter, except as authorized by the rules of this Subchapter." 15A NCAC 2L.0103(d).

20. The groundwater "Standards" are specified in 15A NCAC 2L.0202. *See* 15A NCAC 2L.0102(23). Some groundwater standards and their concentrations are specifically listed in 15A NCAC 2L.0202(g) and (h). If a substance is not specifically listed and if it is naturally occurring, the standard is the naturally occurring concentration as determined by the Director. 15A NCAC 2L.0202(c). If a substance is listed, if it is naturally occurring and the substance exceeds the established standard, the standard shall be the naturally occurring concentration as determined by the Director. 15A NCAC 2L .0202(b)(3). If a substance is not specifically listed and it is not naturally occurring, the substance cannot be permitted in concentrations at or above the practical quantitation limit in Class GA or Class GSA waters, except that the Director may establish interim maximum allowable concentrations ("IMAC") pursuant to 15A NCAC 2L.0202(c). These are listed in Appendix #1 of 15A NCAC 2L. The IMACs are the established standard until adopted by rule. *See* the last page of Plaintiff's Exhibit No. 2.

21. The DWQ Director established the IMAC for Antimony on August 1, 2010 and for Thallium on October 1, 2010, substances for which standards had not been established under the 2L Rules. A copy of the Public Notice establishing the IMACs and a copy of the Approved IMACs are attached hereto as Plaintiff's Exhibit Nos. 3 and 4, respectively, and both exhibits are incorporated herein by reference. The interim maximum allowable concentration for Thallium is 0.2 micrograms per liter ("µg/L") established pursuant to 15A NCAC 2L .0202(c). The interim maximum allowable concentration for Antimony is 1 µg/L established pursuant to 15A NCAC 2L .0202(c). *See* the last page of Plaintiff's Exhibit No. 2.

22. "It is the intention of the Commission to protect all groundwaters to a level of quality at least as high as that required under the standards established in Rule .0202 of this Subchapter." 15A NCAC 2L.0103(b).

23. A "Compliance Boundary" is defined in the 2L Rules as "a boundary around a disposal system at and beyond which groundwater quality standards may not be exceeded and only applies to facilities which have received an individual permit issued under the authority of [N.C. Gen. Stat. §] 143-215.1 or [N.C. Gen. Stat. §]130A." 15A NCAC 2L.0102(3).

24. Pursuant to 15A NCAC 2L.0107(a), "[f]or disposal systems individually permitted prior to December 30, 1983, the compliance boundary is established at a horizontal distance of 500 feet from the waste boundary or at the property boundary, whichever is closer to the source."

25. The "Waste Boundary" is defined in the 2L Rules as "the perimeter of the permitted waste disposal area." 15A NCAC 2L.0102(26).

26. A "Corrective Action Plan" is defined in the 2L Rules as "a plan for eliminating sources of groundwater contamination or for achieving groundwater quality restoration or both." 15A NCAC 2L.0102(5). A site assessment pursuant to a corrective action plan should include the source and cause of contamination, any imminent hazards to public health and safety, all receptors and significant exposure pathways, the horizontal and vertical extent of the contamination, as well as all geological and hydrogeological features influencing the movement of the contamination. 15A NCAC 2L.0106 (g).

27. Pursuant to N.C. Gen. Stat. § 143-215.6C, "[w]henever the Department has reasonable cause to believe that any person has violated or is threatening to violate any of the provisions of this Part [Part 1, Article 21, of the General Statutes], any of the terms of any permit

issued pursuant to this Part, or a rule implementing this Part, . . ." the Department is authorized to "request the Attorney General to institute a civil action in the name of the State upon the relation of the Department for injunctive relief to restrain the violation or threatened violation."

28. The statute further provides that "[u]pon a determination by the court that the alleged violation of the provisions of this Part or the regulations of the Commission has occurred or is threatened, the court shall grant the relief necessary to prevent or abate the violation or threatened violation." N.C. Gen. Stat. § 143-215.6C.

29. Additionally, the section provides that "[n]either the institution of the action nor any of the proceedings thereon shall relieve any party to such proceedings from any penalty prescribed for the violation of this Part." N.C. Gen. Stat. § 143-215.6C.

30. Defendant is a person consistent with N.C. Gen. Stat. § 143-212(4) and pursuant to N.C. Gen. Stat. § 143-215.6C.

Factual and Legal Allegations

All 6 Facilities

31. With the exception of the Sutton Electric Plant, which began groundwater monitoring in 1984, and added new monitoring wells between 1990 and 2011, Defendant implemented a voluntary groundwater monitoring program at most of the 6 Facilities in 2006.

32. In 2009, the DWQ required Defendant to place monitoring wells at the compliance boundaries of all of the Coal Ash Ponds at all 6 Facilities.

33. The DWQ approved Defendant's proposed locations of compliance boundary wells and monitoring wells at each of the 6 Facilities on the following dates:

(1) ***Mayo Steam Electric Plant***– November 12, 2010;

(2) ***Roxboro Steam Electric Plant*** – November 12, 2010;

(3) ***Cape Fear Steam Electric Plant*** – January 4, 2011;

(4) ***Lee Steam Electric Plant*** – January 4, 2011;

(5) ***Weatherspoon Steam Electric Plant***– November 1, 2010; and

(6) ***Sutton Electric Plant*** – March 17, 2011 and October 24, 2011.

34. Defendant constructed compliance monitoring wells at the compliance boundaries of the Coal Ash Ponds at each of the 6 Facilities on the following dates:

(1) ***Mayo Steam Electric Plant*** – November 2010;

(2) ***Roxboro Steam Electric Plant*** – October and November 2010;

(3) ***Cape Fear Steam Electric Plant*** – September 2010;

(4) ***Lee Steam Electric Plant*** – July 2010 and September 2012;

(5) ***Weatherspoon Steam Electric Plant*** – August 2010; and

(6) ***Sutton Electric Plant*** – 1990 to 2012.

35. Each of the 6 Facilities has a specific set of parameters being monitored:

(1) ***Mayo Steam Electric Plant*** – Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(2) ***Roxboro Steam Electric Plant*** – Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(3) ***Cape Fear Steam Electric Plant*** – Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(4) ***Lee Steam Electric Plant*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(5) ***Weatherspoon Steam Electric Plant*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron,

Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc; and

(6) ***Sutton Electric Plant*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc.

36. In 2010 and 2011, with the exception of the Sutton Electric Plant, Defendant began submitting groundwater monitoring data to the DWQ from 5 of the 6 Facilities. Although actual groundwater monitoring started in 1984, the Sutton Electric Plant NPDES Permit required groundwater monitoring to begin in the spring of 1990.

37. On June 17, 2011, the DWQ adopted a Policy for Compliance Evaluation of Long-Term Permitted Facilities with No Prior Groundwater Monitoring Requirements (hereinafter the "Policy for Compliance Evaluation"). A copy of the Policy for Compliance Evaluation is attached hereto as Plaintiff's Exhibit No. 5 and is incorporated herein by reference.

38. The Policy for Compliance Evaluation establishes an approach to evaluate groundwater compliance at long-term permitted facilities. Specifically, the Policy for Compliance Evaluation requires staff and responsible parties to consider multiple factors before determining if groundwater concentrations in samples taken at the permitted facility are a violation of the groundwater standards, or if the concentration is naturally occurring. Such factors considered are well design, sample integrity, analytical methods, statistical testing, etc.

39. All 6 Facilities are subject to the Policy for Compliance Evaluation and Plaintiff has been working with the Defendant to move through the evaluative process as described in the policy.

40. Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the 6 Facilities. The 6 Facilities began submitting data in

2010, and Plaintiff's Aquifer Protection staff prepared 6 charts of the Ash Pond Exceedances from 2010 to July 16, 2013. The 6 charts are labeled by National Pollutant Discharge Elimination System (NPDES) Permit number and facility name. Each chart is attached hereto and labeled individually as Plaintiff's Exhibit: No. 6 (Mayo Steam Electric Plant Ash Pond Exceedances Chart); No. 7 (Roxboro Steam Electric Plant Ash Pond Exceedances Chart); No. 8 (Cape Fear Steam Electric Plant Ash Pond Exceedances Chart); No. 9 (Lee Steam Electric Plant Ash Pond Exceedances Chart); No. 10 (Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart); and No. 11 (Sutton Electric Plant Ash Pond Exceedances Chart); respectively, and are incorporated herein by reference.

41. Each of the 6 charts contains the following information: the well number, the parameter sampled, the date of the sample, the 2L Groundwater Standard, the sampling result and the unit of measurement.

Mayo Steam Electric Plant

42. On July 12, 1982, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0038377 to Progress Energy for the Mayo Steam Electric Plant ("Mayo Steam Electric Plant NPDES Permit"), located in Person County, North Carolina.

43. The Mayo Steam Electric Plant NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on October 14, 2009, with an expiration date of March 31, 2012. On September 28, 2011, Progress Energy submitted a renewal application to the DWQ. Since the Defendant timely applied for re-issuance 180 days prior to the expiration date, pursuant to N.C. Gen. Stat. § 150B-3, Defendant can continue to operate under the 2009 Mayo Steam Electric Plant NPDES Permit until a new permit has been issued. A copy of the 2009

Mayo Steam Electric Plant NPDES Permit No. NC0038377 is attached hereto as Plaintiff's Exhibit No. 12, and is incorporated herein by reference.

44. A Special Order by Consent was approved by the EMC for the Mayo Steam Electric Plant on June 25, 2012 and transmitted to Progress Energy on June 26, 2012. A copy of the transmittal letter and EMC SOC WQ S10-012 is attached hereto as Plaintiff's Exhibit No. 13 and is incorporated herein by reference. To the extent that the SOC modifies the terms of the 2009 NPDES Permit for the Mayo Steam Electric Plant, the SOC controls those terms of the permit until a new NPDES permit is issued or a judicial order is issued.

45. The Mayo Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Mayo Reservoir in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Mayo Steam Electric Plant NPDES Permit.

46. The Mayo Steam Electric Plant NPDES Permit authorizes a cooling tower system less than once per year when the cooling towers and circulating water system are drained by gravity and discharges a wastestream directly into the Mayo Reservoir through Outfall 001.

47. The Mayo Steam Electric Plant NPDES Permit authorizes a cooling tower blowdown system that indirectly discharges to Mayo Reservoir via Internal Outfall 008 to the Ash Pond Treatment System at Outfall 002. Cooling tower blowdown is usually mixed with ash sluice water prior to discharge to the ash pond.

48. The Mayo Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Outfall 002 that discharges directly into the Mayo Reservoir. The Ash Pond receives ash transport water, coal pile runoff, storm water runoff, cooling tower blowdown and various low volume wastes such as boiler blowdown, oily waste treatment, wastes/backwash from the

water treatment processes including Reverse-Osmosis wastewater, plant area wash down water, equipment heat exchanger water, and treated domestic wastewater.

49. The Mayo Steam Electric Plant NPDES Permit authorizes a stormwater discharge system to discharge stormwater to the Mayo Reservoir through Outfalls 004, 005, 006a, 006b, 006c, 006d, 006e, and 010. Drainage from the outside storage area discharges at Outfall 004. Drainage from the industrial area and the oil/bottled gas storage area discharges at Outfall 005. Drainage from the cooling tower(s) chemical feed building structure and the cooling tower area discharges at Outfalls 006a, 006b, 006c, 006d and 006e. Drainage from the haul road for coal ash, limestone, gypsum and gaseous anhydrous ammonia discharges at Outfall 010.

50. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the discharge from Outfall 001 (cooling tower system) require sampling for the following parameters: Flow, Free Available Chlorine, Time of Chlorine Addition, Total Chromium, Total Zinc, Priority Pollutants and pH. The Mayo Steam Electric Plant NPDES Permit prohibits the discharge of polychlorinated biphenyl compounds ("PCBs") such as those used for transformer fluid.

51. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the indirect discharge from Outfall 008 (cooling tower blowdown system) to the Ash Pond Treatment System require sampling for the following parameters: Flow, Free Available Chlorine, Time of Chlorine Addition, Total Chromium, Total Zinc, Priority Pollutants and pH. The Mayo Steam Electric Plant NPDES Permit does not authorize a direct discharge to the Mayo Reservoir.

52. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the discharge from Outfall 002 (Ash Pond Treatment System) require

sampling for the following parameters without FGD wastewater: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Acute Toxicity, Total Arsenic, Total Copper, Total Iron and pH. After the FGD system is used to treat FGD wastewater, the Mayo Steam Electric Plant NPDES Permit requires sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Acute Toxicity, Total Mercury, Total Arsenic, Total Cadmium, Total Chlorides, Total Chromium, Total Copper, Total Fluoride, Total Lead, Total Manganese, Total Nickel, Total Silver, Total Zinc, Total Barium, Total Thallium, Total Vanadium, Total Antimony, Total Boron, Total Cobalt, Total Molybdenum, Total Iron and pH. Among other things, the SOC authorizes Defendant to comply with all terms of its NPDES permit except for Interim Limits for Mercury, Selenium, Boron, Manganese and Thallium during the period of the SOC.

53. The Mayo Steam Electric Plant NPDES Permit also requires Acute Toxicity monitoring, Fish Tissue Sampling for Arsenic only, an annual biological, physical and chemical study of Selenium, and annual monitoring of the waters of Crutchfield Branch, 100 yards downstream of the ash pond, for Arsenic, Copper and Selenium.

54. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the for the discharge from Outfall 010 (stormwater discharge system) require sampling for the following parameters: 13 Priority Pollutant Metals (Silver, Arsenic, Beryllium, Cadmium, Chromium, Copper, Mercury, Nickel Lead, Antimony, Selenium, Thallium, Zinc), Aluminum, Boron, Chemical Oxygen Demand, Total Suspended Solids, Sulfate, Oil and Grease, pH and Total Rainfall.

Unpermitted Seeps at the Mayo Steam Electric Plant

55. As mentioned above, the Defendant's Mayo Steam Electric Plant has two permitted outfalls and eight stormwater outlets discharging directly into the Mayo Reservoir which are included in the Mayo Steam Electric Plant NPDES Permit.

56. Defendant's Mayo Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Mayo Steam Electric Plant NPDES Permit.

57. The Mayo Steam Electric Plant NPDES Permit expressly prohibits a discharge from the ash pond to Crutchfield Branch. Condition A.(8) states: "There shall be no direct discharge from the ash pond to Crutchfield Branch. There shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharge from the ash pond. The permittee shall monitor the waters of Crutchfield Branch, 100 yards downstream of the dike, once per year by grab sample for the following: arsenic, copper, and selenium."

58. Seeps identified at Defendant's Mayo Steam Electric Plant, include engineered discharges from the toe-drains of its Ash Pond, which are at different locations from the outfalls and stormwater outlets described in the Mayo Steam Electric Plant NPDES Permit. Defendant's Ash Pond dam has 2 engineered toe-drains (running east and west) that continuously discharge to Crutchfield Branch and Defendant does not have a permit for this direct discharge.

59. A seep or discharge from the Ash Pond of the Mayo Steam Electric Plant that is not included in the Mayo Steam Electric Plant NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances of the 2L Groundwater Standards at the Mayo Steam Electric Plant

60. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Mayo Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Mayo Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 6.

61. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Chromium (10 µg/L) in compliance wells BG-1 and BG-2 during three sampling events from December 2010 to July 2012, with concentrations ranging from 10.2 µg/L to 40.1 µg/L.

62. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance wells BG-1, BG-2, CW-1, CW-1D, CW-2, CW-2D, CW-3, CW-5 and CW-6 during eight sampling events from December 2010 through May 2013, with concentrations ranging from 52.6 µg/L to 1,440 µg/L.

63. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 milligrams per liter ("mg/L")) in compliance wells CW-3 and CW-6 during three sampling events from July 2012 through April 2013, with concentrations ranging from 520 mg/L to 550 mg/L.

64. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron (300 µg/L) in compliance wells BG-1, BG-2, CW-2D, CW-3, CW-4, CW-5 and CW-6 during eight sampling events from December 2010 through May 2013, with concentrations ranging from 312 µg/L to 2,660 µg/L.

65. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Roxboro Steam Electric Plant

66. On June 30, 1981, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0003425 to Progress Energy for the Roxboro Steam Electric Plant ("Roxboro Steam Electric Plant NPDES Permit"), located in Person County, North Carolina.

67. The Roxboro Steam Electric Plant NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on April 9, 2007, with an expiration date of March 31, 2012. On October 10, 2011, Progress Energy submitted a renewal application to the DWQ. Since the Defendant's predecessor timely applied for re-issuance 180 days prior to the expiration date, pursuant to N.C. Gen. Stat. § 150B-3, Defendant can continue to operate under the 2009 Roxboro Steam Electric Plant NPDES Permit until a new permit has been issued. A copy of the 2007 Roxboro Steam Electric Plant NPDES Permit No. NC0003425 is attached hereto as Plaintiff's Exhibit No. 14, and is incorporated herein by reference.

68. The Roxboro Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Hyco Lake in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Roxboro Steam Electric Plant NPDES Permit.

69. The Roxboro Steam Electric Plant NPDES Permit authorizes a Heated Water Discharge Canal System at Outfall 003. At the point that the discharge canal enters Hyco Lake, it contains flows from several wastestreams including once through cooling water, stormwater runoff and the effluent from the Ash Pond at Internal Outfall 002.

70. The Roxboro Steam Electric Plant NPDES Permit authorizes a coal pile runoff treatment system at Outfall 006 that handles runoff from the coal pile and other coal handling areas, including limestone piles, gypsum piles and truck wheel washwater. The waters are routed to a retention pond for treatment by neutralization, sedimentation and equalization prior to being discharged directly into Hyco Lake.

71. The Roxboro Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Internal Outfall 002 that discharges to the heated water discharge canal and ultimately into the Hyco Lake through Outfall 003. The Ash Pond treats ash transport, low volume wastewater, runoff from the ash landfill, dry flyash handling system washwater, coal pile runoff silo washwater, stormwater runoff, cooling tower blowdown from unit number 4 and domestic sewage plant effluent.

72. The Roxboro Steam Electric Plant NPDES Permit authorizes a cooling tower blowdown system from unit number 4 at Internal Outfall 005 which discharges into the Ash Transport System, and ultimately flows into the Ash Pond at Internal Outfall 002.

73. The Roxboro Steam Electric Plant NPDES Permit authorizes a chemical metal cleaning treatment system at Internal Outfall 009 that occasionally discharges a wastestream to the Ash Pond Treatment System. It contains chemical metal cleaning wastes.

74. The Roxboro Steam Electric Plant NPDES Permit authorizes a domestic wastewater treatment system at Internal Outfall 008 that flows into the Ash Pond Treatment System.

75. The Roxboro Steam Electric Plant NPDES Permit authorizes discharges from an FGD treatment system at Internal Outfall 010. This wastestream is generated from blowdown

from the FGD treatment unit. After treatment in the bioreactors, this effluent is discharged into the heated water discharge canal.

76. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Outfall 003 (heated water discharge canal system to the Hyco Reservoir) require sampling for the following parameters: Flow, Total Residual Chlorine, Total Phosphorus, Total Nitrogen, Temperature, Total Arsenic, pH and Acute Toxicity. The Roxboro Steam Electric Plant NPDES Permit prohibits the discharge of floating solids or visible foam in other than trace amounts.

77. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Outfall 006 (coal pile runoff treatment system to the Hyco Reservoir) require sampling for the following parameters: Flow, Total Suspended Solids, Acute Toxicity and pH.

78. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 002 (Ash Pond Treatment System) require sampling for the following parameters: Flow, Total Selenium, Oil and Grease and Total Suspended Solids.

79. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 005 (cooling tower blowdown system) require sampling for the following parameters: Flow, Free Available Chlorine, Total Residual Chlorine, Total Chromium, Total Zinc and 126 Priority Pollutants.

80. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 008 (domestic wastewater

treatment system) to the Ash Pond require sampling for the following parameters: Flow, Biochemical Oxygen Demand, Total Suspended Solids, Total Ammonia and pH.

81. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 009 (heated water discharge canal system) require sampling for the following parameters: Flow, Total Suspended Solids, Oil and Grease, Total Copper and Total Iron.

82. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 010 (FGD treatment system), require sampling for the following parameters: Flow, Total Beryllium, Total Mercury, Total Antimony, Total Selenium, Total Silver and Total Vanadium.

83. Stormwater runoff to the heated water discharge canal is included in the Roxboro Steam Electric Plant NPDES Permit.

Unpermitted Seeps at the Roxboro Steam Electric Plant

84. As mentioned above, the Defendant's Roxboro Steam Electric Plant has seven permitted outfalls, with two outfalls (Outfalls 003 and 006) discharging directly into Hyco Lake which are included in the Roxboro Steam Electric Plant NPDES Permit.

85. Defendant's Roxboro Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Roxboro Steam Electric Plant NPDES Permit.

86. Seeps identified at Defendant's Roxboro Steam Electric Plant, include 7 engineered discharges to the heated water discharge canal, which are at different locations from the outfalls and stormwater outlets described in the Roxboro Steam Electric Plant NPDES Permit.

87. Seeps identified at Defendant's Roxboro Steam Electric Plant, include 2 stormwater discharges directly to Hyco Lake, which are at different locations from the outfalls and stormwater outlets described in the Roxboro Steam Electric Plant NPDES Permit.

88. A seep or discharge from the Ash Pond or any other part of the Roxboro Steam Electric Plant that is not included in the Roxboro Steam Electric Plant NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances in Violation of 2L Groundwater Standards at the Roxboro Steam Electric Plant

89. The Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Roxboro Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Roxboro Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 7.

90. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in monitoring well CW-5 during seven sampling events from November 2010 to April 2013, with concentrations ranging from 296 mg/L to 873 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities. Monitoring well CW-5 is located at the compliance boundary of the Ash Pond Treatment System at the Roxboro Steam Electric Plant.

91. Defendant's exceedances of the 2L Groundwater Standards for Sulfate at or beyond the compliance boundary of the Roxboro Steam Electric Plant Ash Pond are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Roxboro Steam Electric Plant

92. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Chromium (10 µg/L) in compliance well BG-1 during five sampling events from November 2010 to November 2012, with concentrations ranging from 11.1 µg/L to 42.7 µg/L. The last sample from this well remained an exceedance of the 2L Groundwater Standard. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows additional exceedances from the 2L Groundwater Standard for Total Chromium in wells CW-1, CW-2D, and CW-4 during three sampling events from November 2010 through July 2011, with concentrations ranging from 16.9 µg/L to 29.6 µg/L.

93. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance well CW-3D during eight sampling events from November 2010 through April 2013, with concentrations ranging from 84.8 µg/L to 416 µg/L. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese in compliance wells CW-1 and CW-2 during one sampling event in November 2010, with concentrations of 180 µg/L and 52.9 µg/L, respectively.

94. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in CW-3, CW-4 and CW-5 during seven sampling events from November 2010 through April 2013, with concentrations ranging from 570 mg/L to 652 mg/L in CW-3; with a value of 612 mg/L in CW-4 in November 2011; and with concentrations ranging from 616 mg/L to 1,510 mg/L in CW-5.

95. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron (300 µ/L) in compliance well BG-1 during six sampling events, from November 2010 to November 2012 with concentrations ranging from 307 µg/L to 881 µg/L. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron in compliance wells CW-1, CW-2, CW-2D, CW-3, CW-3D and CW-4 during eight sampling events from November 2010 through April 2013, with concentrations ranging from 321 µg/L to 2,290 µg/L.

96. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Cape Fear Steam Electric Plant

97. On August 30, 1976, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0003433 to Progress Energy for the Cape Fear Steam Electric Plant ("Cape Fear Steam Electric Plant NPDES Permit"), located in Chatham County, North Carolina.

98. The Cape Fear Steam Electric Plant NPDES Permit has been renewed subsequently. The current Cape Fear Steam Electric Plant NPDES Permit was re-issued on July 22, 2011, with an effective date of September 1, 2011, and with an expiration date of July 31, 2016. A copy of the current Cape Fear Steam Electric Plant NPDES Permit No. NC0003433 is attached hereto as Plaintiff's Exhibit No. 15, and is incorporated herein by reference.

99. The Cape Fear Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as an unnamed tributary to the Cape Fear River in the Cape Fear River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the NPDES permit.

100. The Cape Fear Steam Electric Plant NPDES Permit authorizes the West Ash Pond Treatment System (Internal Outfall 001) to discharge through Outfall 007 into an unnamed tributary of the Cape Fear River. The West Ash Pond receives treated wastewater including ash sluice waters (bottom and fly), coal pile runoff, No. 2 fuel oil tank runoff, settling basin drains, sand bed filter backwash, parking lot drains, equipment cooling tower blowdown and drain, boiler blowdown, metal cleaning waste, oil unloading area drains, softener regenerate, demineralizer regenerate, acid/caustic sump wastewater, yard and floor drains, and ash trench drain wastewater.

101. The Cape Fear Steam Electric Plant NPDES Permit authorizes a Once-Through Cooling Water and Stormwater System (Internal Outfall 003) that discharges a wastestream through Outfall 007 into an unnamed tributary of the Cape Fear River.

102. The Cape Fear Steam Electric Plant NPDES Permit authorizes the East Ash Pond Treatment System (Internal Outfall 005) to discharge through Outfall 007 into an unnamed tributary of the Cape Fear River. The East Ash Pond receives treated wastewater including ash sluice waters (bottom and fly), runoff from yard drains, air preheater washes, electrostatic precipitator washes, metal cleaning wastes, spent sandblast material, and treated sanitary wastewater.

103. The Cape Fear Steam Electric Plant NPDES Permit authorizes the discharge of the Combined Wastewater to the Cape Fear River at Outfall 007, which is a combination of all the internal outfalls.

104. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 001 (West Ash Pond Treatment System) require sampling for the following parameters: Flow, Oil and Grease, Total

Suspended Solids, Total Arsenic, Total Selenium, Ammonia-Nitrogen, Total Iron and Total Copper.

105. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 003 (Once-Through Cooling Water and Stormwater System) require sampling for Flow.

106. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 005 (East Ash Pond Treatment System) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Total Selenium, Fecal Coliform, Ammonia-Nitrogen, Total Iron and Total Copper.

107. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Outfall 007 (Combined wastewater and stormwater discharge) require sampling for the following parameters: Flow, Total Chromium, Total Arsenic, Total Selenium, Total Mercury, Total Nickel, Total Copper, Total Nitrogen, Total Phosphorus, Fecal Coliform, Temperature, pH and Chronic Toxicity. The permit also prohibits the discharge of floating solids or visible foam in other than trace amounts.

Unpermitted Seeps at the Cape Fear Steam Electric Plant

108. As mentioned above, the Defendant's Cape Fear Steam Electric Plant has four permitted outfalls, with one (Outfall 007) discharging directly into the Cape Fear River or into an unnamed tributary to the Cape Fear River, which are included in the Cape Fear Steam Electric Plant NPDES Permit.

109. Defendant's Cape Fear Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Cape Fear Steam Electric Plant NPDES Permit.

110. Seeps identified at Defendant's Cape Fear Steam Electric Plant, include potential discharges from its 1985 Ash Pond, which are at different locations from the outfalls and stormwater outlets described in the Cape Fear Steam Electric Plant NPDES Permit.

111. During an NPDES inspection on September 23, 2009, documented sample results from swamp/drainage area near permitted Internal Outfall 005 indicated the possibility of seepage from the 1985 Ash pond. A grab sample was taken during the inspection by Progress Energy and processed at Tritest Lab in Raleigh. Another grab sample was taken by DWQ and processed at the DWQ Lab. The lab results showed the following: for Aluminum (the Tritest Lab reported 216 µg/L; the DWQ Lab reported 1,400 µg/L); for Arsenic (the Tritest Lab reported <3 µg/L; the DWQ Lab reported 140 µg/L); for Molybdenum (the Tritest Lab reported <5 µg/L; the DWQ Lab reported 550 µg/L); for Selenium (the Tritest Lab reported <2 µg/L; the DWQ Lab reported 240 µg/L); and for Vanadium (the Tritest Lab reported 13.3 µg/L; the DWQ Lab reported 250 µg/L). Based on its review of the above results, the Plaintiff's Raleigh Regional Office Surface Water Protection Staff concludes there may be seepage from Defendant's 1985 Ash Pond.

112. A seep or discharge from the Ash Ponds or any other part of the Cape Fear Steam Electric Plant that is not included in the Cape Fear Steam Electric Plant NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances in Violation of 2L Groundwater Standards at the Cape Fear Steam Electric Plant

113. Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Cape Fear Steam Electric Plant from December 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Cape Fear Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 8.

114. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in monitoring well CMW-1 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 1,790 µg/L to 2,950 µg/L; in monitoring well CMW-6 during six sampling events from December 2010 to March 2013, with concentrations ranging from 704 µg/L to 1,010 µg/L; and in monitoring well CMW-8 during eight sampling events from December 2010 to March 2013,with concentrations ranging from 1,070 µg/L to 1,340 µg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

115. Monitoring well CMW-1 is located at the southwest corner of the compliance boundary of the West Ash Pond Treatment System at the Cape Fear Steam Electric Plant. Well CMW-1 is located immediately adjacent to the compliance boundary and the Cape Fear River. Monitoring well CMW-6 is located at the southeast corner of the compliance boundary of the East Ash Pond Treatment System at the Cape Fear Steam Electric Plant. The monitoring well is located approximately 300 feet southeast of the East Ash Pond. Monitoring well CMW-8 is located on the western side of the compliance boundary of the West Ash Pond Treatment System

at the Cape Fear Steam Electric Plant. CMW-8 is located immediately between the compliance boundary and the Cape Fear River.

116. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Selenium (20 µg/L) in monitoring well CMW-3 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 20.6 µg/L to 41.2 µg/L. Although Selenium is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

117. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in monitoring well CMW-2 during seven sampling events from November 2010 to March 2013, with concentrations ranging from 260 mg/L to 630 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

118. Monitoring well CMW-2 is located adjacent to the 1956 Semi-Active Ash Pond located in the northwest corner of the site. CMW-2 is also located on the west-northwest compliance boundary, immediate adjacent to the Cape Fear River

119. Defendant's exceedances of the 2L Groundwater Standards for Boron, Selenium and Sulfate at or beyond the compliance boundary of the Cape Fear Steam Electric Plant Ash Ponds are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Cape Fear Steam Electric Plant

120. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well

CTMW-8 during one sampling event in June 2012, with a concentration of 10.5 µg/L. However, Arsenic is naturally occurring and no other exceedances of arsenic have been identified in this well or in other compliance monitoring wells.

121. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in CMW-1 during eight sampling events from December 2010 to March 2013, with a maximum observed concentration of 54,600 µg/L; in compliance wells CMW-7, CMW-8, CTMW-1 and CTMW-8 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 416 µg/L to 52,700 µg/L; in compliance wells BGMW-4, BGTMW-4, CMW-2, CMW-3, CMW-5, CMW-6, CTMW-2 and CTMW-7 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 303 µg/L to 5,950 µg/L.

122. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance monitoring wells BGMW-4, CMW-1, CMW-2, CMW-3, CMW-5, CMW-6, CMW-7, CMW-8, CTMW-1, CTMW-2, CTMW-7 and CTMW-8, during eight sampling events from December 2010 to March 2013, with concentrations ranging from 51.9 µg/L to 18,000 µg/L.

123. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron in monitoring well CMW-3 during seven sampling events from December 2010 through March 2013, with concentrations ranging from 714 µg/L to 1,260 µg/L. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows an exceedance from the 2L Groundwater Standard for Sulfate in CMW-3 during one sampling event with a concentration of 388 mg/L. Monitoring well CMW-3 is located at the

northwest corner of the compliance boundary of the West Ash Pond Treatment System at the Cape Fear Steam Electric Plant, adjacent to the 1956 Semi-Active Ash Pond.

124. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in compliance wells CMW-2, CMW-3, CMW-6, and CTMW-8, during eight sampling events from December 2010 to March 2013, with concentrations ranging from 502 mg/L to 1,100 mg/L.

125. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for pH levels in monitoring well BGTMW-4 during three sampling events from December 2010 to March 2013, with concentrations of 10.3, 9.4 and 9.1, respectively. However, recent sampling events did not identify pH outside the acceptable 2L Groundwater Standard range of 6.5 to 8.5.

126. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Lee Steam Electric Plant

127. On June 30, 1977, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0003417 to the Progress Energy for the H.F. Lee Steam Electric Plant ("Lee Steam Electric Plant NPDES Permit"), located in Wayne County, North Carolina.

128. The Lee Steam Electric Plant NPDES Permit has been renewed subsequently. The current Lee Steam Electric Plant NPDES Permit was re-issued on October 14, 2009, with an effective date of November 1, 2009, and with an expiration date of May 31, 2013. A copy of the current Lee Steam Electric Plant NPDES Permit No. NC0003417 is attached hereto as Plaintiff's Exhibit No. 16, and is incorporated herein by reference.

129. The Lee Steam Electric Plant NPDES Permit was also modified on November 1, 2009, to reflect a name change.

130. On November 20, 2012, Defendant submitted a renewal application to the DWQ. While the renewal application is being processed, Defendant continues to operate the Lee Steam Electric Plant under the 2009 Lee Steam Electric Plant NPDES Permit.

131. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Neuse River in the Neuse River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Lee Steam Electric Plant NPDES Permit.

132. The Lee Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Outfall 001 that discharges directly into the Neuse River. The Ash Pond receives ash transport water, including effluent from a Rotamix System, storm water runoff, various low volume wastes (such as filter plant blowdown and wash water, combustion turbine wash water), and precipitator and air pre-heater wash water.

133. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of re-circulated condenser cooling water, non-contact cooling water, coal pile runoff, low volume waste, sanitary wastes, stormwater runoff and evaporative cooler wastewater and contaminant stormwater from the combustion turbine site directly into the Neuse River through Outfall 002.

134. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of filter plant wastewater, equipment and contaminant drains, reverse osmosis reject and filter backwash, and quenched-heat recovery steam generator blowdown via Outfall 003 directly into the Neuse River. Generally, chemical metal cleaning wastes are treated by evaporation in boilers.

Unpermitted Seeps at the Lee Steam Electric Plant

135. As mentioned above, the Defendant's Lee Steam Electric Plant has three permitted outfalls discharging directly into the Neuse River which are included in the Lee Steam Electric Plant NPDES Permit.

136. Defendant's Lee Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Lee Steam Electric Plant NPDES Permit.

137. Upon information and belief, Plaintiff believes there are non-engineered seeps at Defendant's Lee Steam Electric Plant, which are at different locations from the outfalls described in the Lee Steam Electric Plant NPDES Permit.

138. A seep or discharge from the Ash Pond or any other part of the Lee Steam Electric Plant that is not included in the Lee Steam Electric Plant NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances In Violation of the 2L Groundwater Standards at the Lee Steam Electric Plant

139. Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Lee Steam Electric Plant from December 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Lee Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 9.

140. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well CMW-6 during six sampling events from December 2010 through June 2012, with a maximum concentration of 665 µg/L; in replacement well CMW-6R during two sampling events from October 2012 and March 2013, with concentrations of 30.2 µg/L and 10.2 µg/L, respectively; and in CMW-10 during one

sampling event in December 2010, with a concentration of 12 µg/L. Although Arsenic is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

141. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in CMW-5 and CMW-6 (with the last two samples taken in CMW-6's replacement well CMW-6R) during eight sampling events from December 2010 through March 2013, with maximum concentrations of 3,940 µg/L and 4,940 µg/L, respectively; in CMW-8 during two sampling events in April 2012 and in March 2013, with concentrations of 754 µg/L and 1,170 µg/L, respectively; and in CW-3 during three sampling events from October 2011 through March 2012, with a maximum concentration of 947 µg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

142. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Chromium (10 µg/L) in CMW-10 during two sampling events in December 2010 and March 2012, with concentrations of 50.3 µg/L and 20.2 µg/L, respectively. Although Chromium is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

143. Defendant's exceedances of the 2L Groundwater Standards for Arsenic, Boron, and Chromium at or beyond the compliance boundary of the Lee Steam Electric Plant are violations of the groundwater standards as prohibited by 15A NCAC 2L .0103(d).

Other Exceedances of 2L Groundwater Standards at the Lee Steam Electric Plant

144. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows consistent exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in compliance well BGMW-9 during eight sampling events from December 2010 through March 2013, with a maximum concentration of 2,960 µg/L; in compliance wells CMW-10, CMW-6/CMW-6R, and CMW-7 during eight sampling events from December 2010 through March 2013, with maximum concentrations of 33,600 µg/L, 11,200 µg/L and 12,400 µg/L, respectively; in compliance well BW-1 during five sampling events from October 2011 through March 2013, with a maximum concentration of 26,700 µg/L; in compliance well CMW-5 during six sampling events from December 2010 through March 2013, with a maximum concentration of 1,140 µg/L; in compliance well CW-2 during five sampling events from October 2011 through March 2013, with a maximum concentration of 17,500 µg/L; in compliance well CW-4 during five sampling events from October 2011 through March 2013; with a maximum concentration of 13,200 µg/L; in compliance well CTMW-1 during seven sampling events from December 2010 through March 2013, with a maximum concentration of 3,690 µg/L; in compliance wells CW-1 and CW-3 during four sampling events from October 2011 through March 2013, with maximum concentrations of 8,540 µg/L and 28,600 µg/L, respectively; and in compliance wells BGMW-10 and CMW-8 during one sampling event in March 2013 with maximum concentrations of 6,050 µg/L and 898 µg/L, respectively.

145. The Lee Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance wells CMW-6/6R and CMW-7 during eight sampling events from December 2010 through March 2013, with maximum concentrations of 936 µg/L and 616 µg/L, respectively; in compliance wells CMW-10 and CTMW-1 during seven sampling events from December 2010 through

March 2013, with maximum concentrations of 732 µg/L and 102 µg/L, respectively; in compliance well BGMW-9 during six sampling events from December 2010 through October 2012, with a maximum concentration 322 µg/L; in compliance well CMW-5 during five sampling events from December 2010 through March 2012, with a maximum concentration of 163 µg/L; in compliance wells CW-1, CW-2, CW-3, CW-4, and BW-1 during eight sampling events from October 2011 through March 2013, with maximum concentrations of 494 µg/L, 205 µg/L, 3,080 µg/L, 1,260 µg/L and 1,130 µg/L, respectively; in compliance well CMW-8 during two sampling events in March 2012 and March 2013, with concentrations of 51.1 µg/L and 2,340 µg/L, respectively; and in compliance well BGMW-10 during one sampling event in March 2013, with a concentration of 83 µg/L.

146. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in CW-1 during one sampling event in March 2012, with a concentration of 1,900 mg/L.

147. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Weatherspoon Steam Electric Plant

148. On March 20, 1980, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0005363 to Progress Energy for the Weatherspoon Steam Electric Plant ("Weatherspoon Steam Electric Plant NPDES Permit"), located in Robeson County, North Carolina.

149. The Weatherspoon Steam Electric Plant NPDES Permit has been renewed subsequently. The current Weatherspoon Steam Electric Plant NPDES Permit was re-issued on

November 20, 2009, with an effective date of January 1, 2010, and with an expiration date of July 31, 2014. A copy of the current Weatherspoon Steam Electric Plant NPDES Permit No. NC0005363 is attached hereto as Plaintiff's Exhibit No. 17, and is incorporated herein by reference.

150. The Weatherspoon Steam Electric Plant NPDES Permit authorizes the continued discharge from a 225-acre cooling pond ("Ash Pond") under extremely severe weather conditions, where unavoidable to prevent loss of life, severe property damage, or damage to the cooling pond structure, or during pond maintenance. The Ash Pond receives recirculated cooling water, coal pile runoff, storm water runoff, ash sluice water, domestic wastewater, various low volume wastes including reject water from operation of a reserve osmosis water treatment unit, and chemical metal cleaning wastewater, discharged from Outfall 001 (potentially).

151. The Weatherspoon Steam Electric Plant NPDES Permit authorizes the continuous discharge of Non-Contact Cooling Water from heat exchanger units through Outfall 002.

152. The Weatherspoon Steam Electric Plant NPDES Permit authorizes a Stormwater Discharge System to discharge stormwater from outfalls SW-1, SW-2, and SW-3 into the Lumber River.

153. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the discharge from Outfall 001 (Ash Pond) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Copper, Total Iron, Total Arsenic, Total Selenium pH, Temperature and Acute Toxicity.

154. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the discharge from Outfall 002 (Non-Contact Cooling Water

system) require sampling for the following parameters: Flow, Temperature, Total Residual Chlorine, Time of Chlorine Addition and pH.

155. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the Stormwater Discharge System require sampling for the following parameters: 40 CFR Part 43 Appendix A 13 Priority Pollutant Metals, Aluminum, Boron, Chemical Oxygen Demand, Total Suspended Solids, Sulfate, Oil and Grease, pH and Total Rainfall. Stormwater from the Weatherspoon Plant must also be assessed for qualitative monitoring requirements, including: Color, Odor, Clarity, Floating Solids, Suspended Solids, Foam, Oil Sheen, Erosion or deposition at the outfall and other obvious indicators of stormwater pollution.

Exceedances in Violation of 2L Groundwater Standards at the Weatherspoon Steam Electric Plant

156. The Aquifer Protection staff of Plaintiff's predecessor division compiled a table of the analytical results of groundwater samples collected at the Weatherspoon Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 10.

157. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the alternate 2L Groundwater Standard for Iron (above the naturally occurring background concentration of 2,040 µg/L) in compliance wells CW-1 and CW-3 during eight sampling events from November 2010 through March 2013, with concentrations ranging from 2,060 µg/L to 4,140 µg/L; and in monitoring well CW-3 during two sampling events in June 2011 and June 2012, with concentrations of 3,740 µg/L and 2,120 µg/L, respectively. Although Iron is a naturally occurring element, its presence in groundwater and specific occurrence at this

site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

158. Defendant's exceedances of the 2L Groundwater Standards for Iron at or beyond the compliance boundary of the Weatherspoon Steam Electric Plant Ash Pond are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Weatherspoon Steam Electric Plant

159. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Thallium (0.2 µg/L) in background monitoring well BW-1 during one sampling event in June 2012, with a concentration of 0.66 µg/L. Background monitoring well BW-1 is located at the compliance boundary of the Ash Pond Treatment System at the Weatherspoon Plant. Well BW-1 is located about 600 feet northwest of the active ash pond. Whether one exceedance of the Thallium standard is sufficient to constitute a violation is unclear.

160. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in monitoring well CW-1 during two sampling events in November 2010 and June 2011, with concentrations of 53.4 µg/L and 53.5 µg/L respectively; and in monitoring well CW-3 during one sampling event in March 2013, with a concentration of 55 µg/L.

161. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Sutton Electric Plant

162 On June 30, 1977, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0001422 to the Progress Energy for the L. V. Sutton Electric Plant ("Sutton Electric Plant NPDES Permit"), located in New Hanover County, North Carolina.

163. The Sutton Electric Plant NPDES Permit has been renewed subsequently. The current Sutton Steam Electric Plant NPDES Permit was re-issued on December 2, 2011, with an effective date of January 1, 2012, and with an expiration date of December 31, 2016. A copy of the current Sutton Electric Plant NPDES Permit No. NC0001422 is attached hereto as Plaintiff's Exhibit No. 18, and is incorporated herein by reference.

164. The Sutton Electric Plant NPDES Permit authorizes the discharge of wastewater to receiving waters designated as the Cape Fear River in the Cape Fear River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Sutton Electric Plant NPDES Permit.

165. The Sutton Electric Plant NPDES Permit authorizes the discharge of cooling pond blowdown, recirculation cooling water, non-contact cooling water and treated wastewater from Internal Outfalls 002, Internal Outfall 003, and Internal Outfall 004 via Outfall 001, which discharges directly into the Cape Fear River, Class C-Swamp waters in the Cape Fear River Basin.

166. The Sutton Electric Plant NPDES Permit authorizes the discharge of coal pile runoff, low volume wastes, ash sluice water (including wastewater generated from the Rotomix system), and stormwater through Internal Outfall 002.

167 The Sutton Electric Plant NPDES Permit authorizes the discharge of chemical metal cleaning waste through Internal Outfall 003. Generally, chemical metal cleaning wastes are treated by evaporation in boilers.

168 The Sutton Electric Plant NPDES Permit authorizes the discharge of coal pile runoff, low volume wastes, and stormwater runoff from Internal Outfall 004.

169. The Sutton Electric Plant NPDES Permit authorizes the discharge of ultrafilter water treatment system filter backwash, closed cooling water cooler blowdown, reverse osmosis/electrodeionization system reject wastewater and other low volume wastewater to the Cooling Pond from new Internal Outfall 005 after beginning operation of a natural gas fired combined cycle generation facility.

170. The Sutton Electric Plant NPDES Permit authorizes the discharge of low volume wastewater including the heat recovery steam generator blowdown and auxiliary boiler blowdown into the cooling pond from the new Internal Outfall 006 after beginning operation of a natural gas fired combined cycle generation facility.

171. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Outfall 001 require sampling for the following parameters: Flow, Temperature, Total Residual Chlorine, Time of Chlorine Addition, Total Copper, Total Nitrogen, Total Phosphorus, Dissolved Oxygen, Acute Toxicity, Total Mercury, pH, Total Suspended Solids, Total Selenium, and Total Arsenic.

172. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Internal Outfall 002 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Total Selenium, and Amonia-Nitrogen.

173. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Internal Outfall 003 require sampling for the following parameters: Flow, Total Copper and Total Iron.

174. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Outfall 004 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Total Arsenic and Ammonia-Nitrogen.

175. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for Internal Outfall 005 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, and pH.

176 The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for Internal Outfall 006 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, and pH.

Exceedances in Violation of 2L Groundwater Standards at the Sutton Electric Plant

177. The groundwater monitoring requirements in the Sutton Electric Plant NPDES Permit require sampling the following compliance wells MW-4B (background), MW-5C (background), MW-7C, MW-11, MW-12, MW-19, MW-21C, MW-22B, MW-22C, MW-23B, MW-23C, MW-24B, MW-24C, MW-27B, MW-28B, MW-28C and MW-31C. All current wells being sampled are located at or beyond the Compliance Boundary. Prior to October 24, 2012, the groundwater monitoring requirements in the Sutton Electric Plant NPDES Permit required sampling the following wells MW-2C, MW-4B (background), MW-5C (background), MW-6C, MW-7C, MW-8, MW-9, MW-10, MW-11, MW-12, MW-17, MW-18, and MW-19. Some wells sampled prior to October 24, 2012, were located inside the Compliance Boundary.

178. Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Sutton Electric Plant from March 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Sutton Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 11.

179. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Thallium (0.2 µg/L) in compliance wells MW-19 during four sampling events from October 2011 through March 2013, with a maximum concentration of 0.62 µg/L; and in compliance wells MW-22C and MW-24B during two sampling events in October 2012 and March 2013, with maximum concentrations of 0.35 µg/L and 0.586 µg/L, respectively. Although Thallium is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

180. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Antimony (1 µg/L) in compliance well MW-24B during two sampling events in October 2012 and March 2013 with a maximum concentration of 1.1 µg/L. Although Antimony is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

181. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in compliance well MW-7C during two sampling events in March 2012 and June 2012, with a maximum concentration of 767 µg/L; in compliance well MW-12 during four sampling events from March 2012 through March 2013, with a maximum concentration of 1,510 µg/L; in MW-19 during five sampling events from

October 2011 through March 2013, with a maximum concentration of 1,940 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,720 µg/L; in compliance well MW-22C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,100 µg/L; in compliance well MW-23B during two sampling events in October 2012 and March 2013 with a maximum concentration of 1,330 µg/L; in compliance well MW-23C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,580 µg/L; in compliance well MW-24B during two sampling events from in October 2012 and March 2013, with a maximum concentration of 1,420 µg/L; in compliance well MW-24C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,160 µg/L; in compliance well MW-28C during one sampling event in March 2013, with a concentration of 1,030 µg/L; and in compliance well MW-31C during sampling events in October 2012 and March 2013, with a maximum concentration of 1,120 µg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

182. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Selenium (20 µg/L) in compliance well MW-27B during two sampling events in October 2012 and March 2013, with a maximum concentration of 37.1 µg/L. Although Selenium is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

183. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) at compliance well MW-24C during two sampling events from October 2012 to March 2013, with a maximum concentration of 579 mg/L. The presence of Total Dissolved Solids in groundwater and the specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

184. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in compliance well MW-21C during one sampling event in October 2012, with a concentration of 814 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

185. The Sutton Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L GW standard for Manganese (50 µg/L) in compliance well MW-7C during four sampling events from March 2012 through March 2013, with a maximum concentration of 458 µg/L); in compliance well MW-12 during four sampling events from March 2012 through March 2013, with a maximum concentration of 281 µg/L; in compliance well MW-19 during three sampling events from October 2011 through March 2013, with a maximum concentration of 508 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,460 µg/L; in compliance well MW-22B during one sampling event in October 2012, with a concentration of 116 µg/L; and in compliance wells MW-22C, MW-23B, MW-23C, MW 24B, MW-24C, MW-28C, and MW-31C during two sampling events in October 2012 and March 2013, with maximum concentrations of

798 µg/L, 348 µg/L, 1,150 µg/L, 805 µg/L, 2,360 µg/L, 367 µg/L and 1,800 µg/L, respectively. Although Manganese is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

186. The Sutton Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in compliance well MW-11 during one sampling event in March 2011 with a concentration of 420 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 7,680 µg/L; in compliance well MW-24C during one sampling event in October 2012, with a concentration of 2,860 µg/L; and in compliance well MW-31C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,820 µg/L. Although Iron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

187. The Sutton Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Lead (15 µg/L) in compliance well MW-12 during one sampling event in March 2012, with a concentration of 17.3 µg/L. Although Lead is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

188. The Sutton Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well MW-21C during one sampling event in March 2013, with a concentration of 15 µg/L. Although Arsenic is a

naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

189. Defendant's exceedances of the 2L Groundwater Standards for Thallium, Antimony, Boron, Selenium, Total Dissolved Solids, Sulfate, Manganese, Iron, Lead and Arsenic at or beyond the compliance boundary of the Sutton Electric Plant Ash Ponds are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Risk Factors Due to Exceedances of the 2L Groundwater Standards at the Sutton Electric Plant

190. Violations above 2L Groundwater Standards have been measured in compliance wells MW-7C, MW-19, MW-21C, MW-22B, MW-22C, MW-23B, MW-23C, and MW-28C which are located upgradient of two water supply wells (PW#3 and PW#4) serving the New Hanover Water System identified as CFPUA/NHC-421 (No. NC0465191). Water supply wells PW#3 and PW#4 are located approximately 2,200 feet from the compliance boundary or approximately 2,700 feet from the edge of the ash ponds.

191. Compliance well MW-7C has shown violations of the 2L Groundwater Standards for Boron, Iron, and Manganese. Compliance well MW-19 has shown pH, Boron, Iron, Manganese, and Thallium violations. Compliance well MW-21C has shown violations Sulfate, Arsenic, Boron, Iron, and Manganese. Compliance well MW-22B has shown pH and Manganese violations. Compliance well MW-22C has shown pH, Boron, Iron, Manganese, and Thallium violations. Compliance well MW-23B has shown pH, Boron, and Manganese violations. Compliance well MW-28C has shown pH, Boron, and Manganese.

201. Defendant's exceedances of the groundwater standards for Iron at or beyond the compliance boundary of the Weatherspoon Steam Electric Plant Ash Pond are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

202. Defendant's exceedances of the groundwater standards for Thallium, Antimony, Boron, Selenium, Total Dissolved Solids, Sulfate, Manganese, Iron, Lead and Arsenic at or beyond the compliance boundary of the Sutton Electric Plant Ash Ponds are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

203. Plaintiff is entitled to injunctive relief, as set forth more specifically in the prayer for relief, pursuant to N.C. Gen. Stat. § 143-215.6C.

204. Defendant's violations of N.C. Gen. Stat. §§ 143-215.1(a)(1) and (a)(6) for the unpermitted seeps and Defendant's violations and potential violations of the 2L Groundwater Standards, without assessing the problem and taking corrective action, poses a serious danger to the health, safety and welfare of the people of the State of North Carolina and serious harm to the water resources of the State.

PRAYER FOR RELIEF

WHERFORE, the Plaintiff, State of North Carolina, prays that the Court grant to it the following relief:

1. That the Court accepts this verified complaint as an affidavit upon which to base all orders of the Court;.

2. That the Court preliminarily, and upon final judgment permanently enter a mandatory injunction requiring the Defendant to abate the violations of N.C. Gen. Stat. § 143-215.1, NPDES Permits and groundwater standards at the 6 Facilities;

3. That the Court preliminarily, and upon final judgment permanently enter a mandatory injunction requiring the Defendant take the steps required in the attached "Ash Ponds

Assessment Needs", which is attached hereto as Plaintiff's Exhibit No. 19, and is incorporated herein by reference;

4. That the Defendant be taxed with the costs of this action;

5. Any other and further relief that the Court deems to be just and proper.

Respectfully submitted, this the 16th day of August, 2013.

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Attorneys for the Plaintiff
State of North Carolina ex rel.
North Carolina Department of
Environment and Natural Resources

Attachment 4

Order Denying Plaintiff's Motion to Stay Proceedings
September 9, 2015

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION

Civil Action No. 13-CVS-14661

STATE OF NORTH CAROLINA ex rel.
NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES,
Plaintiff,
and

CATAWBA RIVERKEEPER
FOUNDATION, INC., WATERKEEPER ALLIANCE,
MOUNTAINTRUE, APPALACHIAN VOICES,
YADKIN RIVERKEEPER, INC., DAN RIVER BASIN
ASSOCIATION, ROANOKE RIVER BASIN
ASSOCIATION, AND SOUTHERN ALLIANCE FOR
CLEAN ENERGY,
Plaintiff-Intervenors,
v.

DUKE ENERGY CAROLINAS, LLC,

Defendant.

STATE OF NORTH CAROLINA
COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION

Civil Action No. 13-CVS-11032

STATE OF NORTH CAROLINA ex rel.
NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES,
Plaintiff,
and

SIERRA CLUB, WATERKEEPER
ALLIANCE, CAPE FEAR RIVER
WATCH, INC., NEUSE RIVERKEEPER
FOUNDATION, ROANOKE RIVER BASIN
ASSOCIATION and WINYAH RIVERS
FOUNDATION,

Plaintiff-Intervenors,
v.

DUKE ENERGY PROGRESS, INC.,

Defendant.

ORDER DENYING PLAINTIFF'S MOTION TO STAY PROCEEDINGS

THIS MATTER came before the Honorable Paul Ridgeway, Superior Court Judge presiding by designation pursuant to Gen. R. Prac. Rule 2.1, during a hearing on September 14, 2015, upon Plaintiff's Motion to Stay the Proceedings. Having considered Plaintiff's motion, responses of the Plaintiff-Intervenors and Defendants, Plaintiff's reply, and arguments at hearing, the Court DENIES the Plaintiff's Motion to Stay the Proceedings.

This 22nd day of September, 2015.

The Honorable Paul R. Ridgeway
Superior Court Judge Presiding

Attachment 5

Figure 2-1 Site Layout Map

LEGEND

- MW-17S / MW-17BR — SOIL BORING AND MONITORING WELL LOCATION (SURVEYED)
- ABMW-1 / ABMW-1S — ASH BORING, PORE WATER, AND GROUNDWATER MONITORING WELL LOCATION
- SB-2 — SOIL BORING LOCATION
- SW-CB1 — SURFACE WATER AND SEDIMENT LOCATION
- BG-1 — BACKGROUND MONITORING WELL (SURVEYED)
- MW-2 — COMPLIANCE MONITORING WELL (SURVEYED)
- MW-3 — MONITORING WELL (SURVEYED)
- PZ-3 — PIEZOMETER (SURVEYED)
- DEP 1 — DUKE ENERGY PROGRESS PRODUCTION WELL - NOT IN SERVICE (SURVEYED)
- EDR 1 — EDR REPORTED SUPPLY WELL (APPROXIMATE)
- SEEP 01 — SEEP LOCATION
- NPDES OUTFALL 001 — NPDES OUTFALL
- DUKE ENERGY PROGRESS - MAYO PLANT
- 500 ft COMPLIANCE BOUNDARY
- 1500 ft OFFSET FOR UNDERGROUND UTILITY INFORMATION
- WASTE BOUNDARY
- PARCEL LINES
- FLOW DIRECTION
- A — A' GEOLOGIC CROSS SECTION

SOURCES:

1. 2010 AERIAL PHOTOGRAPH OF PERSON COUNTY, NORTH CAROLINA WAS OBTAINED FROM NRCS GEOSPATIAL DATA GATEWAY AT *http://datagateway.nrcs.usda.gov/*
2. 2012 AERIAL PHOTOGRAPH OF HALIFAX COUNTY, VIRGINIA WAS OBTAINED FROM NRCS GEOSPATIAL DATA GATEWAY AT *http://datagateway.nrcs.usda.gov/*
3. 2014 AERIAL PHOTOGRAPH WAS OBTAINED FROM WSP FLOWN ON APRIL 17, 2014.
4. DRAWING HAS BEEN SET WITH A PROJECTION OF NORTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3200 (NAD 83).
5. 2015 GROUNDWATER ASSESSMENT WELL AND BORING LOCATIONS WERE BASED ON SURVEY DATA DATED JULY 17, 2015 PROVIDED BY McKIM & CREED OF WILMINGTON, NORTH CAROLINA.
6. PROPERTY LINE, LANDFILL LIMITS AND BOUNDARIES ARE FROM ARCGIS FILES PROVIDED BY S&ME AND PROGRESS ENERGY.
7. PARCEL BOUNDARIES WERE OBTAINED FROM PERSON COUNTY (NC) GIS DATA AT *http://gis.personcounty.net* THE TOPOGRAPHY SURVEY DATA WITHIN THE PROPERTY.
8. THE TOPOGRAPHY SURVEY DATA WITHIN THE PROPERTY BOUNDARY DATED MAY 19, 2015 WAS OBTAINED FROM WSP OF CARY, NORTH CAROLINA.

NOTE:

1. CONTOUR LINES ARE USED FOR REPRESENTATIVE PURPOSES ONLY AND ARE NOT TO BE USED FOR DESIGN OR CONSTRUCTION PURPOSES.

GRAPHIC SCALE

500 0 250 500 1000

(IN FEET)

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DRAWN BY: C. NEWELL	DATE: 6/9/2015
CHECKED BY: J. WYLIE	DATE: 6/9/2015
PROJECT MANAGER: K. WEBB	
LAYOUT NAME: FIGURE 2-1	

DUKE ENERGY PROGRESS

MAYO STEAM ELECTRIC PLANT
10660 BOSTON RD
ROXBORO, NORTH CAROLINA

FIGURE 2-1
SITE LAYOUT MAP